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# **GLEANINGS IN THE BEE CULTURE** A JOURNAL DEVOTED TO BEES AND HONEY AND HOME INTERESTS. ILLUSTRATED SEMI-MONTHLY Published by THE A. I. ROOT CO. \$1.00 PER YEAR MEDINA, OHIO

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## **STRAY STRAWS** FROM DR. C. C. MILLER.

ARE YOU GOING to Lincoln, Oct. 7? [Yes, A. I. R. and your humble servant are planning to go.—ED.]

SOME NEW FACES will be at Lincoln that I'm anxious to see, and some old friends that I'm anxious to greet.

THE PAN OF SALT hasn't sweetened the cistern very much, but I think it has a little. I don't see any objection to carbonate of soda except the expense.

IF ALL THE CAKE and all the cooked sweets were utterly banished from the table, and Nature's own sweet, honey, substituted therefor, I believe it would add greatly to the health, happiness, and longevity of the nation.

SENSIBLE is Doolittle, p. 643, in thinking good performance the thing to watch in selecting stock to breed from, and I believe every bee-keeper can do something toward improvement in that line. I know one who might do more of it than he does.

OUT OF ALL THE AGITATION that's taking place, I hope we may yet see an organization of bee-keepers strong in numbers and influence, and it matters little whether it's made out of old or new cloth. [Yes, indeed. See another column.—ED.]

THE ONLY REASON I desire the peculiar head on the spacing-nail is simply so it shall easily go just the right depth in driving. I've tried the common wire nail, and, aside from the difficulty of driving, I like it not only a "little bit" but very much. Theoretical objections that I had against it have disappeared in actual practice.

A. I. ROOT, you're altogether too modest. If I were president of the convention to meet at Lincoln, I'd blow about what a big time we were going to have, to try to get everybody to go. For the first time, all outside the one State

are to be boarded and bedded free, and travel is less price than usual. [You wait, doctor, till we get a little nearer the time of the convention. We do not want to waste all our powder at the start.—ED.]

LIKE G. C. GREINER, I never before had so much trouble with swarms in August—more than in June, virgin queens coming out with laying queens in some cases. Here's a case he didn't have: A large swarm at an out-apiary had hung two days on a tree. I cut off the limb and carefully placed the swarm at the entrance of a hive. Swarm gently arose, and sailed and sailed away east, leaving two bee-keepers standing with mouths wide open.

THE MUCH-LAUDED and much-condemned Punics or Tunisians have proved themselves—at least the half-breeds—to be excellent gatherers—hardy, cross, and the champion gluers of the world. No good for comb honey—make watery combs; but for extracted honey they may be a good thing. [Your experience seems to tally very well with the bees we have had of this race; but on account of their being champion gluers, and so very cross, we were very glad to get rid of them.—ED.]

I SEND HERewith, attached to the manuscript of this Straw, the best frame-spacer I have ever tried. Do you think I could get it patented? [The frame-spacer that Dr. Miller sends is nothing more nor less than a stout wire nail  $1\frac{1}{4}$  inches long, and a scant  $\frac{1}{8}$  inch in diameter. I have no doubt it would make a very good spacer. But a nail-head is objectionable on account of its liability to catch in the wire cloth of the extractor. I have never tried extracting from such frames, but others have, and they say they do not like them.—ED.]

I'D REALLY LIKE to know whether I'm mistaken as to the general use of the word "section" for the honey that's contained in a section box. You use it that way yourself, Mr. Editor, on p. 632, in the next sentence but one after saying you never use it so. "We ate half a section of honey" would pass for good English generally, I supposed. What would you



consider better English? [Yes, doctor, I think you are mistaken as to the general use of "section" for honey, especially when you speak about cutting the "section out of the wood." You say I use it that way on page 632. I have read that page over twice, but I can not find where I used it so.—Ed.] □

C. H. CLAYTON may be away off as to the price of drawn combs, but he's level as to the dealer's profit on honey. Why should he have twice as much for handling honey as molasses with only half the trouble? Out of joint somehow. [Commission men say that comb honey, at least, is much meaner to handle than syrups. There is the breaking down, the leakage, and the tendency of the combs to deteriorate in appearance in time. As to extracted honey, it candies, while syrups do not; but taking every thing into consideration, there is too great a difference.—Ed.]

I DON'T WONDER you didn't like the spacers you mention on page 632, Mr. Editor, if you used only 100 for 12 eight-frame hives. I use 384, four to each frame. But I suspect there's some mistake in your wording. Less than four spacing-nails to a frame could only result in failure. [Yes, indeed, there *was* a mistake, and there is no use in trying to "explain" how it happened. What I should have said was that 100 would be enough for six hives, leaving two spacers to a frame. I couldn't get along with four, "no-how." I have tried them that way; and the chief objection to them is their catching when putting in and removing from the brood-nest. Two are bad enough.—Ed.]

□ "THE GRANDEUR of the Flowery Kingdom is made more wonderful to the imagination of man by the busy bee, who makes the wild rose bow with beauty as it yields up its sweetness to the ever vigilant master who refuses to be comforted until all its commercial worth has duly and deftly been extracted by the untiring genius of this marvelous insect." Thus opens up a honey-dealer's advertisement. Eloquent, isn't it? [The firm who puts out this flowery circular is C. R. Horrie & Co., of Chicago, to whom we referred in our last issue editorially as the commission house concerning whom numerous complaints had come in from bee-keepers last season. But the wise bee-keeper will not be misled by such a mess of schoolboy oratory as is found in the introduction to that circular.—Ed.]

A WRITER in *British B. J.* says care should be taken to have excluder zinc right side up; that, by rubbing your hand over it, you'll find one side smooth and the other rough, and that the bees should be allowed to go up through the smooth side. But I can't find any great difference in the two sides. How is it, Mr. Editor? [If the zinc is punched poorly, so that there is left a burr edge on one side, it may be an advantage to put the smooth side down; because,

according to the Englishman's theory, the bees are supposed to go up through the zinc fat (full of honey) and come back lean (without any). It makes very little difference, however, with most of the perforated zinc on the market in this country. We aim to keep the dies and punches of our machine sharp enough so that there will be practically no burr edge on any of our zinc.—Ed.]

I WISH YOU HADN'T said, p. 648, "As to prices on comb honey, 12 cts. seems to be about a fair average," for I'm sure you didn't mean to bear the market. The average of all the prices given, p. 648, is 13.3; and that includes prices, not only of those reporting, but of some of the little producers who take just what they can get. The average for fancy white, p. 629, is just about 13. But what's the good of striking an average, any way? Who's to be guided by it? Certainly not those who can get 20, and hardly those who can get only 10. [I gladly accept your correction as to the average of comb honey. When I made the answer I was hurrying to take the train, and did not stop to figure it out. The price is low enough without giving the impression that it should be lower than it really is, and I apologize to all bee-keepers who have secured a little honey this year.—Ed.]

"LARGE CROP all over excepting California," says one commission firm, p. 635. That story seems to have got under headway, and I don't believe it's true. Reports on p. 648 certainly don't warrant it; and, taking California into account, I have some doubt whether the season has been better than 1895. The season has been phenomenally early, and receipts of commission men should on that account far surpass last year with the same crop; yet of the 12 who give any comparison, p. 634, only 6 say receipts have been greater, and 4 say lighter. [The statistical reports as published in our last issue did not give an entirely correct view of the honey season. When I said this season was better than last I based my estimate on the larger number of orders received, and especially on the greater demand for honey-labels. Last year we received very few orders for labels. This year there has been a larger demand for them than for several seasons past.—Ed.]

IF ANY ONE KNOWS any good reason why end-bars and bottom-bars should not be the same widths as top-bars, will he please rise and give it? [The only reason that I can assign why the bottom-bars are usually narrower than the top-bars is because, the smaller that bottom-bar is, the more likely the bees are to build the comb down to it. If I am correct, doctor, you once advocated bars  $\frac{3}{8}$  square, and I know I did. Well, the bees built their comb down to these bars all well enough; but the trouble was, when there was a good honey-flow they extended them clear past the bars; and for that reason our supply establishment decided on a com-

promise— $\frac{3}{4}$  inch wide. We have a good many combs built down to bars of this width; and in no case that I remember have the bees built past them. If the bars were  $1\frac{1}{32}$  or  $1\frac{1}{16}$  wide they would be almost sure to leave a bee-space between the comb and the bottom-bar. This would be a waste of valuable space, besides being a good place for the queen to hide.—ED.]

### THE NEW BEE-KEEPERS' SOCIETY.

SHALL IT BE NATIONAL OR INTERNATIONAL?

*By Dr. A. B. Mason.*

Every little while I see statements in the different bee-journals that "kinder rile" me; and if I could have the writers close by me when I first read their statements I'd make them believe that they had l—li—lie—misrepresented something.

On page 609 of GLEANINGS for Aug. 15 I find this statement. In speaking of amalgamation, the editor says: "Well, then I would make it national; and I am inclined to think that the society whose operations are confined to one country would be more easily managed, and could do more good, than one that tries to cover one or more countries and makes a poor fizzle of it after all." I never was an editor, so I don't know how they do their thinking; but an ordinary mortal wouldn't have to think at all to know "that the society whose operations are confined to one country . . . could do more good than one that tries to cover one or more countries and makes a poor fizzle of it," unless "the society whose operations are confined to one country" should also make "a poor fizzle of it."

The editor's statement seems to imply that a society that tries to cover more than one country would prove a failure and make "a poor fizzle;" but so far as the N. A. B. K. A. and the N. A. B. K. Union are concerned it is not true. Until 1893 the Bee-keepers' Union was known as the N. A. B. K. U., and included in its territory "all of the United States and Canada." That year the constitution was changed to the "National Bee-keepers' Union," and Canada was left out; but Article 5 of the constitution provides that "any person may become a member," etc., and in his report for 1894 the General Manager says, "The National Bee-keepers' Union knows no dividing lines of States, Provinces, or Territories. . . The Union defends its members . . . no matter where they happen to reside." So the Union covers more than one country; and if it is a "fizzle" it is a pretty healthy one; and if it continues to "fizzle" in the future as in the past it will be a long time before there will be any "flies on it."

Again, the editor says, "But as some of our friends have objected strenuously to amalgamation; it has seemed to me that it would be bet-

ter to drop that scheme and make the Union such an organization as the great mass of us desire." Now, for one I'm not in favor of dropping the amalgamation scheme because some are opposed to it. Ever since amalgamation was first proposed I have been opposed to it unless it could be accomplished without in any way interfering with the usefulness of the Union; and in all I have seen in the bee-journals, and in private correspondence, I have not seen a good reason given for not carrying out the scheme. For the past four months I have been corresponding with all the bee-keepers, from the Atlantic to the Pacific, and in Canada, who have said any thing about amalgamation or organizing a new society, that I have seen in the bee-journals, trying to get them to put their ideas in the shape of a constitution, and have succeeded in getting but three—one each from California, Illinois, and New York, and all of them are for a new representative organization. I have studied over the matter a good deal and have come to the conclusion that I am in favor of amalgamation, and believe that it can be accomplished, and in such a way as not in the least to interfere with the usefulness of the Union, but rather be a benefit to it, and also be a benefit to more bee-keepers than are now in touch with it, and at the same time be a benefit to the annual meeting, that can be held the same as is now done by the N. A. B. K. A.

It is usually much easier to say what ought to be done than to tell how to do it; but some of the most active in our fraternity, besides members of the amalgamation committee, have been comparing notes in the matter, and others will contribute their quota toward evolving a scheme by which amalgamation, if possible, may be accomplished, and the result will probably be a report at the Lincoln meeting, from the amalgamation committee, that will be acceptable to both the National Bee-keepers' Union and the N. A. B. K. A.

"Again, some object to having the new organization international," says the editor. Well, what if they do? Some people "object" to almost any thing, without giving a good reason for so doing. We've had a man in our U. S. Congress who was, and is still, known as the "great objector;" but I don't believe he's a bee-keeper. I can't see any real objection to having the new organization international. Canadians have been members of both organizations, or of the Union, from their first organization, and they have behaved pretty well. To be sure, they "brag and bluster" sometimes, but "we uns" have got used to that, and don't mind it. They are big-hearted; and if they are a little egotistical, like their neighbors, they mean all right.

To be sure, they "are away ahead of us in having a flourishing society," and well they



might be; but they can't beat the Union. Just let Uncle Sam give us from five hundred to eight hundred dollars a year,\* as the Dominion does the Canadian bee-keepers' organization, so that we could pay bee-keepers to join our society and work for it, and our Canadian friends would be just nowhere compared with us. I see no more harm in taking their money for a membership-fee, in the future, than in the past. If a Canadian pays his membership-fee into an international treasury, it entitles him to be protected in his rights in the way and to the extent that the constitution provides for, and our money helps to do it, and his money helps to protect our bee-keepers, and I don't see how any "disagreeable complications" could arise.

Quoting again from the editorial it says, "Having two, as we now do, is expensive and unnecessary, while it is perfectly evident that one could do the work of the two. . . . I say, away with amalgamation, and let the Union set about to reorganize itself as soon as it can." Well, well! did you ever? It is possible that "one could do the work of two;" but if annual or any other general meetings are to be held, how is the expense to be done away with? Perhaps some State will, each year, go Nebraska "one better," and foot all the bills, transportation included.

I don't see any object in the Union reorganizing itself. It seems to have had faithful and efficient officers from the start, and to have done its work efficiently. I don't see how it could have done better.

Some may say, "Well, you have taken a good deal of space, and have given nothing definite as to what kind of an organization you think would be best." Yes, I know I haven't; but I know the amalgamation committee and some others are trying to formulate something that will be generally acceptable, and will report to the meeting of the N. A. at Lincoln.

Some are in favor of a representative organization; but this country of ours is too large for such an organization. The business necessary to be done to protect the bee-keeper's interest can be done as it is now by the Union, and the social part of the organization will have to be enjoyed by such only as can spare the time and money to attend such gatherings.

I see by GLEANINGS for Sept. 1st, which has just come to hand, that the wonderful "Skylark" has "put his foot in it" as usual. In speaking of the coming meeting of the North American at Lincoln, he says, "This is just the chance you want to form and organize a new union and honey exchange—national in every respect. There will be present a large number of bee-keepers—men of national repu-

tation, almost equal to myself, and you will not get such a body together soon again." And then he goes on to tell what ought to be done, and advises that the North American with its present membership, be turned into a new "Union and Honey Exchange," and in three months there will be 1000 names on its rolls, etc.

Well, well! Skylark is great on advice; but I wonder why such a great and wise man as he is doesn't go ahead without so much talk, and tell *how to do it*. I guess I know the reason. Wise people are usually modest, and his modesty—not wisdom—keeps him from showing his *ign—igno—ignorance*—no, not just that, but keeps him from telling how to do it. But I'm in the same fix he is. I never before realized how much alike Skylark and myself are; only he is so much the greater man that I fear he would hardly like to associate with me; but the very next chance he gets he'll strike at me, and then hide behind a *nom de plume*.

It can not be expected that an organization can be perfected at once; but "there seems to be a feeling in the air" that measures should be taken at Lincoln to begin the work of perfecting an organization that shall not only protect its members in the enjoyment of their rights, and prosecute adulterators, but also aid the members and others in disposing of the products of the apiary to the best advantage.

I have studied the By-laws of the California Bee-keepers' Exchange with a great deal of interest, and can see no reason why the Exchange should not be a success; and it is possible that something in this line may yet be organized to represent a larger territory, or even the whole United States.

But something more is required of a national organization than to act as a medium of exchange. Adulteration must be looked after; and, if I mistake not, the present National Bee-keepers' Union stands ready to do this whenever requested to do so; but before beginning operations they must have positive proof, such as will stand the test in the courts. I am glad indeed that it "appears" to Skylark, when looking through his "little microscope," that the little—but mighty—Union is watching that \$700 that is laid away for future use. That is just what that \$700 is for—future use; and it should not lie around loose, especially when any one may be skylarking around.

Toledo, O., Sept. 2.

[Now, look here, doctor. It "kind o' riles" me to have you pitch into me as the chief offender, more especially as you try to make me imply what I did not mean or say. I did not say that the Bee-keepers' Union or the North American was a poor fizzle because either might be international. The National Bee-keepers' Union (more national than anything else) is not a fizzle by any means, and never was; but the North American—I will say it now—tried to be international, and made a fizzle of it; and finally at Keokuk it was voted to make it simply an organization that would

\*Since the above was written I have come across the statement that, in 1895, the Ontario B. K. A. received for membership \$175; from affiliation, \$65; government grant, \$650; total, \$890.—A. B. M.

take in the United States and Canada. Understand that I do not say that, while it was international in name, the *society* was a fizzle, but that the *trying* to be international was a fizzle. As North American it did well considering its limited functions, if I may use that term, and our great geographical distances. If it had been distinctly national I am rather of the opinion that it would have done better still, because our geographical distances are too great even then. Now, what riles me is that you place "trying to cover one or more countries" and a "poor fizzle" together, when you know I meant one was the natural sequence of the other.

As I said in that same editorial to which you refer on page 609, I am not now, nor was I then, particular whether the new organization should be national or international, or whether it should be a combination of the two societies, or a product of one; namely, the Bee-keepers' Union. The most I cared about, and do care now, is *something* that will be accepted by the majority. If that majority desires the amalgamation of the two into one society that shall be international, then I am with it heart and soul; but I shall *feel* just the same that the chances of success will be better to have it distinctly national. Why, we have not now, and never have had, a national bee-keepers' association in my recollection. The Ontario bee-keepers have a society that is practically national; at least, it does not step out of the border lines of its own country. The British Bee-keepers' Association is another sample. Both of these national societies are a success in every sense of the word. Are we so small in numbers that we must needs go to other countries for support? You will remember that, three or four years ago, the bee-keepers of the United States wanted to have the North American incorporated, and some of the leaders in Canada opposed it so bitterly that those of us who desired peace advocated dropping incorporation. The new Bee-keepers' Union must necessarily be incorporated, for how can it sue or be sued, and how can it prosecute honey adulterators unless incorporated? What is to prevent the Canadians from objecting on the same grounds as before? I am well aware that not all of them did so object. I cite this only to show that there would be local differences, and that it might be easier to have one distinctly national organization. If the Canadians desire to have a protective society, they could very easily, by a slight modification in their constitution, hitch to their present organization a protective union—one that would do the work that the Bee-keepers' Union of this country has done and can do in the future.

Now, having had "my say" in favor of a national organization, I am willing to drop the idea entirely, and take in Canada, if it seems more feasible and practicable to the majority of bee-keepers. As to amalgamation, I do not care much either way whether our new society is made out of two or one organization. Personally I was in favor of amalgamation at the very start, and am yet.—Ed.]

## THE UNION AND REORGANIZATION.

TRIENNIAL MEETINGS; TWO CLASSES OF MEMBERS.

By Geo. W. Brodbeck.

Mr. Editor:—I notice that Dr. Miller, in one of his *Straws*, Aug. 15, propounds the following question: "And do I understand you to say,

Bro. B., that you now want to kill the Union and get up something else? If so, just tell us what it is, and if you've got something better I am with you."

The question on amalgamation is now of not much interest; so, concerning this, a reply is not necessary, for the whole voices itself in the self-evident fact that we all now favor a distinctive national organization that will represent the interests of the bee-keepers of the whole United States; so my reply is in reference to the Union.

In my article in *GLEANINGS* and in the *American Bee Journal*, which appeared some time ago, proposing a national association, I at that time favored a separate and distinct organization from our present Union; but where you, Mr. Editor, with the indorsement of Mr. York and others, favored the reorganization of the Union, I too began to realize the advisability of utilizing by enlargement the tried and tested foundation of the Union in the establishment of just such an organization as we are in need of. So you see, doctor, my object is not "to kill," but to build up; and while some of us may differ in regard to minor details I believe in the main we can agree, and I for one am disposed to give due credit to all who have been interested in this subject and in their attempts to solve the problem of the general good of the bee-keeping fraternity of the United States; and I trust that the presentation of the following propositions of how best to attain this object will not be considered presumptuous, but as coming from one who is aiming to add his mite toward its accomplishment; and by the careful sifting of all the sands presented we may glean sufficient gold with which to build.

The one great obstacle to contend with in the endeavor to secure State, Territorial, or sectional representation to a bee-keepers' congress is the expense and loss of time to those who would be forced to travel a long distance; and unless we can devise ways and means to defray and distribute this expense, all of our efforts to secure a representative assembly will result in failure.

The defensive feature of the Union is another, for some favor it and some do not. There are some others; but as I desire to be brief I will present my suggestions for overcoming these; for by the accomplishment of this we no doubt can remove others.

To satisfy and induce a like interest in a national association I would divide the membership into two classes:

1. The protective class.
2. The non-protective class.

The first class would be those whom the association would defend in their legal rights, the same as the Union does at present; and the second class would be those who would share all other benefits except the above. The mem-



bership-fee in the first being one dollar, and in the second class 50 cents; that 25 cents from each entrance-fee and from each annual payment be reserved and deposited as a reserve fund for the express purpose of the payment of mileage of properly certified delegates to and from the meeting of the association.

Now, to secure a fund sufficient to meet the expense of such representatives it may be necessary for us at first to decide on triennial sessions, and to limit representation to one for every fifty and over, and two for every one hundred and over, the membership of each State or Territory making its own selection of delegates. The membership in each State is to select one of its members as a director, said director to supervise and attend to the interests of its members subject to the General Manager; also an executive board composed of the officers of the association, who are empowered to act for the organization in all matters pertaining to the interests of its members or the association proper.

I might give you many more; but as I consider these the essential features in the construction of a national organization I trust they will suffice.

There have been many good suggestions presented toward the establishment of a national association by many of our most prominent writers; but I do not remember of a single one mapping out a practical solution of this problem. In a letter received from one of our most prominent bee-keepers a short time since, he states, "It is quite easy to say a thing can and ought to be done, but it is quite another thing to tell how to do it;" and then in addition I desire to say that it is so easy to criticize, and too often it ends in putting obstructions in the path of those who are endeavoring to advance the cause of the whole; and unless something better can be suggested, our criticism, as a rule, results in no good. As regards the propositions presented in this article, I am perfectly willing to submit them for criticism to Dr. Miller or any one else; but in doing so, please remember that the writer is not infallible; and if you can aid by suggesting additional or better propositions, remember you are doing it for the good of the many.

Los Angeles, Cal.

[While I am in sympathy with some plan of representation, similar to what you propose, it seems to me it would entail too great an expense, and in time render the association bankrupt. You yourself see that it would take liberally of the funds, and suggest only triennial meetings. With gatherings so far apart, I am rather of the opinion that we should lose interest in and perhaps forget about the association. The annual meetings of the North American were the very life of it. Enthusiasm, the motor force of many of our organizations, would be kept up by annual meetings, but not by triennial gatherings. One of the main reasons for reorganizing the Union was that it might have

annual meetings; and your plan, it appears to me, would make this impossible, at least for the present.

I doubt the wisdom of having two classes of members. If any of them need protection, they *all* want it. Why not one class, and every member eligible to *all* the privileges of the association?—ED.]

### PRICES ON HONEY.

A GOOD ANSWER TO THE QUESTION WHY IT IS LOWER NOW THAN IN THE '70's.

By Adrian Getaz.

"Friend Getaz explains, p. 563, that the price of honey is governed by the price of the corresponding quality of corn syrup. But how about comb honey? □ Does glucose control the price of that?" So writes Dr. Miller, p. 595.

Certainly, dear doctor; but as the *quality* of comb honey is superior to that of extracted honey, the price of comb honey is higher in proportion. In fact, when I wrote the above I had both in mind, comb honey as well as extracted.

It is entirely unnecessary to bring politics into the question of honey prices. We did get a much higher price for honey in the '70's than we do now; but why? □ In the '70's there were no substitutes to compete. All the sweets we had were sugars, mostly dark (but little white sugar was used, as it was retailed, at least here, at about 20 cts. a pound or more); some New Orleans molasses and sorghum molasses, made in ordinary iron kettles, both pretty nearly as black as tar, and a limited quantity of home-made apple-butter and also some good but high-priced New Orleans molasses. Now all this is changed. White sugar is sold at 5 cts. per lb. instead of 20 or more. With the invention of the evaporator, quite an amount of fairly good sorghum molasses is turned out every year. With the falling price of sugars has also fallen the price of the New Orleans molasses; and, above all, corn or glucose syrups are sold in enormous quantities, under all sorts of fancy names, such as "Pure Golden Drops," "Golden New Orleans syrup," "Pure California orange honey," etc. Add to this an immense quantity of candies, jellies, more or less artificial, and other confectioneries made possible by the cheapness of sugars and glucose, and then you needn't look for any thing else than the competition on the markets of the above substitutes. We are "confronted by a condition and not by a theory," and we can not change the situation.

But, on the other hand, we need not be afraid of lower prices, even if the production of honey were considerably increased; for these substitutes are sold now at the lowest possible margins, and an increase of honey production would simply displace them in part, as, at equal or somewhat higher prices (especially in the



case of comb honey), the consumer will take the honey in preference.

#### DEAD BROOD.

While I have "the pen in hand" I should like to know if, in the apiaries of those reporting some peculiar cases of dead brood, the symptoms of bee-paralysis have been observed (page 610, Aug. 15th issue). Those who read the *American Bee Journal* know that the disease exists in East Tennessee, at least in this part of it, and that I have had and am yet having quite an experience with it. I can not say positively whether bee-paralysis will kill any of the brood or not; but I suspect that it does sometimes. I have had many cases of some dead brood carried out I could not account for otherwise; yet, in the absence of a microscopical investigation, I can not say. I don't see why it should not. There is a fundamental difference between foul brood and bee-paralysis—that is, the rapidity of development. In foul brood, the brood attacked is sure to die in a short time, and infect the rest of the hive. I suppose the matured bees attacked will soon leave the hive and die outside. I also suppose that a queen attacked by the disease would die before she could lay many infected eggs, if any at all; hence the reason why queens do not transmit the disease. There is no doubt about the liability of matured bees to contract the disease. Bacilli have been found in their bodies, even in the ovaries of the queen.

But bee-paralysis is a slow-developing disease. In most cases bees already showing symptoms in the fall will survive through the winter, and even give the colony a start in the spring. It is likely that many of these sick bees had contracted the malady while in the larval stage or got it from the queen through her eggs. It is also likely that some of the brood may die of the disease. A microscopical investigation of the dead and living brood would settle the question.

By the way, a full investigation and scientifically conducted experiments on bee-paralysis would be a splendid subject for some of our experiment stations, much more useful than hair-splitting experiments on the thickness of foundation.

Some may doubt the possibility of transmission of disease by the queen's eggs. But those acquainted with the silkworm know that the worms attacked by a bacillus almost identical with those producing foul brood and bee-paralysis will not always die in the larval state, but go through their regular transformations, and lay eggs containing spores of the disease. These spores develop themselves into bacilli as the worm emerges and grows. In fact, the transmission of the disease through the eggs is, in the silkworm disease, the principal one.

Knoxville, Tenn.

[While it is possible that causes that have

avored lower prices on general commodities have had something to do with the lower prices on honey, it is probably true that the lower prices on other sweets besides honey have had more to do with it. We must not forget, also, that there is a larger number of bee-keepers, and consequently a larger amount of honey produced, as compared with the '70's. The more producers, the more there are who are willing to put their honey on the market at *competitive* prices; but it does seem as if the great reduction in prices on sweets other than honey, and the greater *variety* of them has done more than all the other causes combined to reduce the price on our product.

Regarding bee-paralysis and its relation to dead brood, I have never noticed in any cases in our own yard that there was dead brood along with the paralytic bees; but the next case we see of it we shall watch very carefully. I should like to hear from all those who have had this disease, whether they have noticed along with dead brood paralytic bees. It is possible that one microbe is the cause of both; namely, dead brood and what we now call bee-paralysis.—ED.]

#### TO FIND THE COLONY THAT CAST THE SWARM.

By G. C. Greiner.

At this writing bees are nicely at work again on buckwheat. Although the flow does not seem to be as profuse as it is some years, it promises to yield at least a fair crop. As this is the last source from which we can expect any surplus honey for this season, to make the best of it all forces must be kept at work in supers; and swarming is, therefore, not desirable. But what are we going to do? they have been very much inclined that way for the last week or two, from one to three swarms being the average per day. (This is another peculiar feature of this season—now and then a buckwheat swarm is what we expect; but to have so many we have never before experienced.) The only profitable way to deal with these swarms is to hive them back to their mother-colonies, either with their queens, after all queen-cells have been destroyed, or, if there is any reason to suspect superseding, without them.

When prime and second swarming was the order of the day, I have stayed in the apiary without intermission—would not leave at meal time, even, without having a substitute to watch; hiving back, whenever desired, was, therefore, an easy matter. But lately my work has been such that I could not very well remain constantly with the bees, and most of these late swarms have been found swarming or clustered; consequently their places of issue were unknown. To return these swarms to their homes I have practiced dequeening with the very best of success. At first this may seem like a tedious job; but with a little practice any one soon gets to be an expert at this business. Of course, all swarms that are to be treated in this way have to be hived in the hiving-box. If they are small, a close search will generally reveal

her majesty somewhere in sight, and a quick grab with thumb and forefinger will secure her, even if a dive of an inch or two among the bees is necessary. If the queen is not in sight at first, and does not show herself soon, I take the box on the ground, and, by tipping it from one side to the other, manipulating the bees in such a way that they are scattered thinly all over the inside of the box, sides and bottom; and, nine cases out of ten, the queen will come in sight.

But how can we tell that all the queens are taken from the swarm, after finding one or two? Well, the bees will tell. I hang the box in a



LOOKING FOR THE QUEEN.

convenient place, and wait a few minutes. If they have still another queen with them they will remain quiet, and another search is necessary; but if they are queenless they become uneasy and are soon on their way home.

It is not so easy with large swarms. After they have become quiet in the hiving-box I dump the bulk of them in front of a hive with a set of cleaned extracting-combs. Very frequently the queen is then in sight; but if not, when the bees with their accustomed hum begin to travel toward the hive I set the box with the remaining bees (see illustration), which have also begun the same hum, on the other side of the pile, and soon the bees are drawn in opposite directions, one column traveling toward the hive, the other toward the box. This scatters the swarm over so much territory that matters must be very much against us to miss the queen. But in case she did escape our vigilance she must be either in the hive or in the box; and as soon as the queenless part begins to show this uneasiness, hunting for their queen, I carry the other part with the queen in the near-by bee-cellar. Those left outdoors are thus made queenless, and point out to us the hive from which they issued by their returning *thre-to en masse*. We have then the opportunity to destroy the queen-cells of that colony and return the remainder of the swarm from the bee-cellar if we desire. If for any reason we wish to find the queen it can be done much easier, since the swarm has been divided. The set of combs, over which the half-swarm is dis-

tributed, can be looked over to better advantage than when twice as many bees are crowded together; or, if the queen had happened to find her way into the hiving-box, the same operation as taking a queen from a small swarm will accomplish the object.

All valuable queens, which I obtain by hiving swarms back without their queen, I keep in nuclei as a reserve in case any are needed; otherwise I build them up as best I can until fall. If by that time they are not strong enough to winter separately, they are united. They occupy a row by themselves, so that two or three can be easily put together.

These nuclei are made from swarms that are not sufficiently strong to work in supers—generally such as have been found queenless in the fore part of summer, and at that time supplied with a queen-cell or perhaps a virgin queen. To form these nuclei I move the swarm that I have selected for this purpose to a new stand; a comb of brood with a caged queen and a couple of empty combs or frames are placed in a contracted hive on the old stand to receive the flying bees. After a day or two, when the queen is released, this makes a strong nucleus and can be built up very fast. The removed colony is by this time destitute of all flying bees, and contracted to its brood-combs. Any time thereafter, every one of these with its adhering bees and a queen can be used to start a nucleus. As they have no flying bees, those taken with each comb will remain wherever placed.

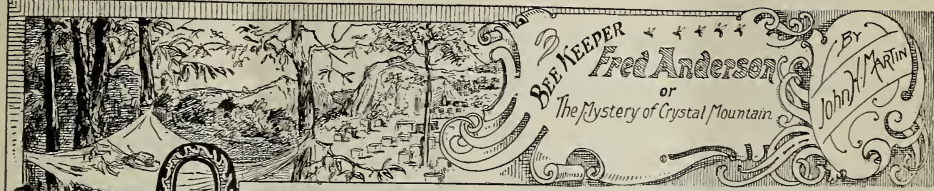
Naples, N. Y., Aug. 15.



A. P., Pa.—Sorghum molasses is not nearly as good for feeding bees as syrup from granulated sugar, especially for winter feeding. However, bees do winter very well on such feed; and as you have the article we would risk it.

C. N. W., N. Y.—Our dovetailed chaff hives are intended to winter out of doors in most localities; but in extremely cold climates, or where there is great exposure, we recommend putting these hives with the bees into the cellar. Then when they are taken out in the spring the double wall protects them much better than a single-walled hive. We think you will find the plan will work very satisfactorily. Your cellar, however, needs to be perfectly dark, and one where the temperature does not vary much above 50 degrees nor below 40. If you put the chaff hives in the cellar, we would advise you to try part of them with just a thin cloth laid on top of the brood-nest—nothing more.





"O-O O! great gunss!" shouted Mr. Ghering: "I vas stung! Oh! I vas stung mit the hair on the top of my head!" and he plunged into the bushes. "There's more as ten thousand bees in my hair."

"Oh, no!" said Fred, coming to him in the bushes; "there are only two or three—see;" and he picked out the offending bees.

"Was that so? Anyways, that was remarkable how those two, three made so much noise, and made my head feel like it was in one hot oven."

After Fred had extracted the stings and consoled him, Mr. Ghering found that he was not hurt much after all; and, laughing loudly, said, "Shust think how it was comical. I was smiling all over my face with an open invitation for them to make a charge; but they all went into the back door of my head, through that von little hole in my hat;" and Mr. Ghering went off scratching his head. His parting words to Fred were to go into some other business, for those bees had all of the anger of McBurger and the devil of Dawson; "but it was so comical."

Upon being left alone again, Fred cut down the two cottonwood-trees, and, after scoring and hewing them, he had two pieces of timber which faced up eight inches. Halving in several cross-pieces and legs, and covering all with Oregon pine, Fred completed a bench of such generous proportions, and of such a firm nature, that he patted it with his hands admiringly, and, jumping upon it, let out his exuberant spirits by dancing a little jig.

Fred had secured some provisions from down the river, or "grub stake," as the miners say; and for the present, or until he had time to put up his cabin, he proposed to back it under the friendly cottonwoods. After eating his supper, in the performance of which he used his new work-bench for a table, and still having some minutes of daylight, he selected a number of the rickety hives and proceeded to renail them.

"No spring in that bench," said he, as he nailed up the first hive. "Nothing like having a firm foundation to a fellow's business."

The strokes of Fred's hammer were rapid and lusty, and awoke the echoes in a wide circle

around him. The men from the ranch came over to see the progress of the enterprise. Mr. Ghering had recovered from his stinging experience in the morning, and, under the friendly shades of evening, approached without fear.

"Well, Fred," said he, as he came up, "I think you work all day and all night. When you have been in this country two, three, four years, sometimes less, you will not work so hard as fury."

"When I have any thing to do," replied Fred, "I believe in doing it; and especially in this case I can not neglect the work, for, to secure the best results, it must be done right now. In bee-keeping we must have our dish right side up at the proper time, or we lose the harvest."

"I always supposet in the bee-business that the bees do all the work—shust as they did in my hair this morning—ha, ha! and the bee-owner he do somedings else until he was hungry for honey; then he shust opens his hife and helps himself. But I have learned one thing—he must have no leedle holes in the top of his hat."

"Why, boss," said Matt Hogan, "baa-kaaping is loike fishing—yees must have the bait on the hook, the hook in the wather, and yerself a navigating the pole; it's just aisy whin yees know how."

"Your illustration is very good," said Fred, "but you must be sure of another important thing—that there are fish in the water."

"That's so," said Matt, scratching his head. "But thin, Mистер Fred, who'd be such a murdering fool as to fish in an ould frog-pond where there's no fish?"

"If you aspire to become a bee-keeper, Matt, that is one of the conditions. We get our apicultural hook carefully baited, throw it into the stream, and wait and wait; but no fish rise to the bait. In other words, there's no honey in the flowers, and our labor is in vain."

"Well, thin, I'd move up stream, and try all the coves, or go over to the Feather or the American River. Be gorry, I'd find the fish."

"That's it, Matt; you would be a migratory bee-keeper."

The late evening air now became quite cool, as it always does in this climate, and the men dropped off one by one to the ranch and to their bunks. Fred called Ghering's attention to his work-bench, and expatiated upon its strength and other good points; "and," said he, "I shall use it at present for a work-bench, table, and

bedstead. It is a cosy place for all of these purposes near these trees."

"You was welcome to the bunk-house or any place at the ranch," said kind Mr. Ghering; "but if you prefer the pench and the trees it vas good to be intependent;" and Mr. Ghering and Matt left Fred to the enjoyment of his new quarters.

The day's busy work had it's wearing effect upon Fred, and he soon rolled himself in his blankets upon his new work-bench. The tired muscles soon relaxed, and he slept soundly until aroused by nature's alarm-clock, the mockingbird.

Whistles, squalls, and melody resounded from an overhanging branch; and though it was in the earliest glow of the morning Fred arose to plan for the labors of the day.

The bees were all quiet, save a prosperous humming in the hives; and Fred, with mattock in hand, strolled out to his path upon the face of the cliff, and made further enlargements where necessary. This done, and breakfast prepared and eaten, the hives were again taken in hand.

"It's meself that's with yees," said Matt Hogan as he suddenly strode out of the little fringe of bushes near the work-bench. "I have half a day off, and will help yees and learn about the bees."

"Well, now, that is fine; but we shall have to learn together, for this cave-bee management is entirely new to me: but when we get them into the hives, perhaps I can then teach you something. Now, Matt, you see these hives and frames—"

"I certainly do see them, Fred, for they're furninst me two eyes."

"Well, you see they are much out of shape. They have the disease known as the weewams, and need doctoring. We want to give them a dose of hammer and nails; and while I do the hammer act, you may tighten up these fine wires in these frames this way—see? and put in new ones from this spool where they are broken or entirely missing."

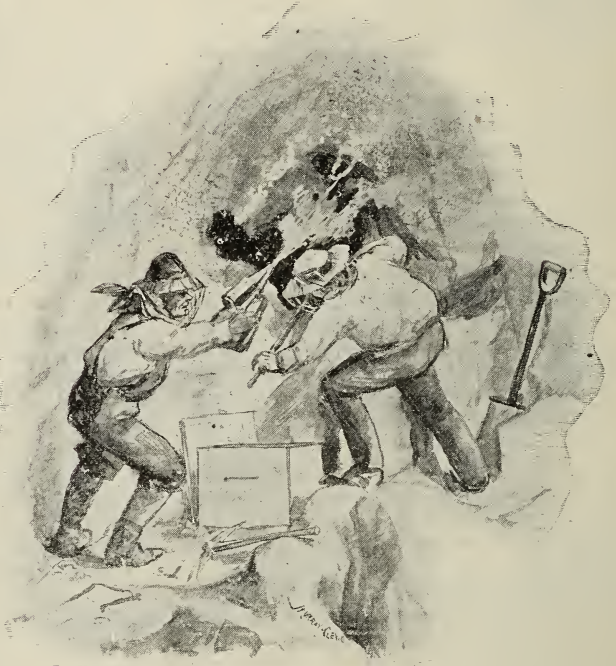
"That I will, and do it loike a daisy; and sure is it telephone wires for the king-baa they are?" said Matt.

"That's a queer idea, Matt; but, no; those

wires are used for supporting foundation comb like this remnant here—see? But I want all of these wires in for transferring purposes, as I will show you soon."

Ten hives were ready for the bees; and, looking at his watch, Fred said it was now half-past eight o'clock, "and we can work with the bees better now than we could at an earlier hour."

Smokers and vells were brought into use. Several journeys were made along the cliff, and all of the proper tools were deposited down near the cave and bees to be operated upon. Finally Fred took the mattock and knocked away the pieces and cut a large opening into



MATT HOGAN AND FRED AT THE CLIFF.

the vicinity of the colony he had uncovered a few days before.

"Now, Matt, you blow smoke in here while I clip away the chalk, and we'll soon have these fellows out."

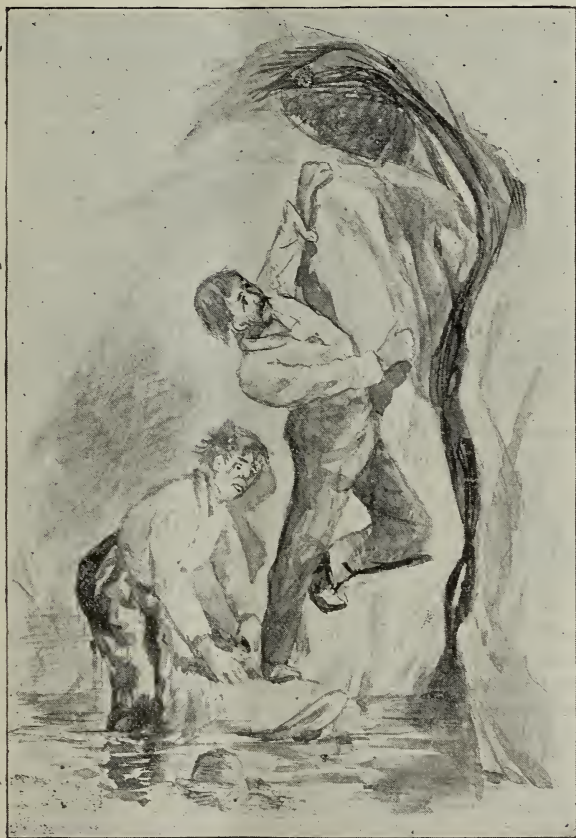
"Out!" said Matt, vehemently; "be gorry, what does yees call it but out they are now? Wo-o-o! the roar makes me faale quare, and me knaa-caps are all of a rattle."

"Oh! you will get used to that," said Fred, as he cut out a large section of comb containing honey and brood. Brushing the adhering bees in front of the hive, the comb was laid carefully upon a board, and trimmed to fit inside the hive-frame. "Now, here is a trick



worth knowing," remarked Fred; "those wires in the center of the frame appear to prevent fitting the comb in properly; but by cutting a little crease in the comb quite to the center along each wire, the latter can be imbedded, holding the transferred comb securely, as you see," said Fred as he slipped his honey-knife under the comb and raised it and the frame to an upright position, and placed it in the hive. "Now the bees will have something to cluster upon."

Fred was an expert at transferring, and the combs were rapidly fitted into the frames.



"MATT. CAN WE HANG ON HERE ALL DAY?"

Pieces of comb, several to a frame, were fitted and held by the wires, as well as full ones; and by the time the colony was transferred, Matt's knee-caps had ceased to rattle, and his interest increased. His questions were asked at the top of his voice, for the roaring of the bees was now terrific. Nearly all of the bees that belonged to that individual colony were secured, and the hive was carried up to its place on the bluff. Here a latticework arrangement was placed before the hive, so that the bees would be sure to mark their location; "and, Matt, if

you ever wish to move bees a short distance successfully," explained Fred, "shut the bees in the hive in the evening, and keep them shut in until an hour after sunrise; then move to the new location! The excitement inside the hive, and the lattice arrangement in front, lead them to thoroughly mark the location when they do come out."

"Och!" said Matt, with a sigh; "me education about baas has been sadly neglected. Faith, an' it's a great study, aqual to astronomy, geology, raisin' pigs, or any other science. I fear me thick head'll not contain the half yees are a tellin' me."

Again the expert and the novice went down the cliff with a hive for another transfer. Matt had not received a sting, and was getting very free in his movements.

"Knee-pans all right?" asked Fred.

"Not a flicker there this time," replied Matt, looking down his trousers legs. But a few minutes later, while Fred was making an opening toward the next colony, and Matt close behind him, the latter grabbed the leg he had been admiring, and shouted, "Be gorry, Fred, there's a baa a crawling up me leg! Shoo! go back, ye little strake of avil."

"Now, Matt, you just let the bee alone, and stand still. When a bee gets to climbing so, it never goes back."

"And where in the name of sinse will it go to? I am wonthering," shouted Matt.

"Oh! if nothing happens to it upon its perilous journey it will come out with a happy buzz upon your shirt-collar. Where is the bee now, Matt?"

"Ouch! it be a climbing me backbone—wo-o-o!" and Matt trembled as though he had the ague. "Bedad! bad luck to the pizen baste! it's a stinging me!"

and Matt was jumping and stamping in good style, to the edification of Fred, who stopped work to laugh heartily. But the next moment the chalky ledge upon which they were standing could endure no more stamping, and suddenly gave way, and they were both plunged into the water, twenty feet below. Such a fall sent them both under the water; but as no further harm came to them from the falling debris they soon came to the surface.

Frantically tearing off their hats and veils, which were now decidedly inconvenient fix-

tures, both sought some shallow standing-place; but the bottom of the cave was like a well with a deep rounding bottom. The sides were as smooth as water could make them, and, moreover, slippery with slime. The opening, which was three feet wide, twenty feet above, was only six inches for several feet above the water, and of such a nature that but little light entered the well, except from above; and as this portion of the cave was large at the bottom and smaller at the top, our bee-keepers found themselves in a precarious situation. They were both, fortunately, good swimmers; and as soon as Fred had cleared his vocal organs, and had taken in the situation, he exclaimed with deep disgust, "Well, this is a pretty kettle of fish."

"Faith, that's jist me own idaa's," said Matt; "an if I'm to name the braad of fish we are, I'm thinking we're floundhers."

"Whatever we are," said Fred, "the prospect is not very transporting." During their conversation they had searched for a standing or holding-on place; but the only support of that nature was at the six-inch crevice, and here they finally anchored close together.

"Well, Matt, the question is, can we hang on here all day? for surely Mr. Gehring or the men will not come out here until evening, and I do not see any way of escape except with their aid."

"It is certainly a sarious question," said Matt; "an it'll be a tiresome job to hould on to these shlippery rocks all day. I wonther, I wonther, shall I ever see my Biddy Malooney again at all, at all."

"Oh! we must not be discouraged," said Fred, cheerfully; "every cloud has its silver lining, and the righteous shall never be forsaken."

"Aye, that's it—righteous!" said Matt; ye know, Fred, yees told me last Sunday that it was an unrighteous act to go fishing on that day, an I went. Me conscience troubles me a bit; an what think yees, Fred, did me unrighteous fishing bring me to this pass?"

"Oh! no, Matt, you are getting superstitious. You know I did not go fishing, and I am in as bad a fix as you."

"That's so, Fred; but all the same, let me get out of this with sinse, an I'll never go fishing again on Sunday, so help me Saint Patrick."

"That's a good resolution, Matt. But what on earth is that I hear?"

"It's a speerit," whispered Matt, superstitiously. Then they both listened breathlessly, and, penetrating through the crevice, came the song:

The night is stormy and dark,  
My lover is on the sea;  
Let me to the night winds hark,  
And hear what they say to me.



#### PAPER TRAYS FOR HONEY-CRATES.

*Question.*—I have been told that you use something in the bottoms of your honey-cases, when sending section honey to market, to catch the drip or leakage, should there be any during shipping or in handling, so that the honey from the crate above will not daub the top of the crates below, the floor of the car, or store, or any thing else. This leaking of crates is a nuisance that grocers do not like; so if you have any plan to prevent it, won't you tell us about it in your department in GLEANINGS? Tell us all the little kinks about making, using, etc.; for one little item, so explained that any one can appropriate it, is of more value to one who has no experience than half a dozen articles hinting at things of value, but not put in form so they can be of use to the rank and file of bee-keepers.

*Answer.*—Very well. If the managers of GLEANINGS do not object, I will try to give all the items regarding the paper trays I use in the bottoms of my honey-crates, even if it takes the whole of my allotted space to do this in; for there is little use in writing to help some one else unless it is made plain enough so the reader can appropriate it to himself or herself.

The first thing wanted is the paper. After testing many different kinds I have come to the conclusion that none is equal to that known as "manilla" having more or less of a glossy finish on it, for the purpose we wish it for. This kind of paper will hold honey a year without wetting or soaking through, while much of the common paper from the stores, such as wrapping paper, etc., will soak through in from a few hours to a week. This manilla paper can be had or bought for about 7 cents per pound at the present time; but I used to pay 10. It comes in sheets from 24 by 36 inches, up to 40 by 60, or therabouts. The size I use is 30 by 40, as that cuts to the least waste for my crates.

As to the cutting. You can generally get it cut to the size you wish at the store where you buy it; but as I always wish to use more or less of it for other purposes, I cut it myself. To do this I employ one of two plans; the first of which is to lay the paper flat on my work-bench; and, after having marked the upper sheet into the size I wish, I take a straight-edge, lay it on the paper in the right place, bear on the same to hold it in place, when with a sharp knife it is cut by drawing the knife several times along the straight-edge, each drawing cutting to the depth of from three to five sheets.

The second way, and the one most often used,



is to proceed as before as to the marking, when I lay a long thin saw on the paper, the back of which is straight, and then tear the paper the same as you would tear it by a ruler, the back of the saw being used in place of the ruler, as it is longer. After a little experience you will be able to tear from six to eight sheets at a time, thus saving time. The paper should be cut  $1\frac{1}{2}$  inches larger each way than the bottom of the crate which you use.

Having the paper cut and ready, the next thing needed is a board one inch in thickness, and of a size so it will go snugly into the crate; that is, fit nicely, but not so tight but that you can jar it out. Get this board out true and nice, having all the corners true and sharp, for you will wish to keep it for years. If it is made of some kind of hard wood, the corners will stay sharp longer and the board keeps smoother. Now lay one sheet of paper on the bench and place this board in the center of it each way, which will make your paper project  $\frac{3}{4}$  inch on all sides of the board, if you have done every thing right. Put your fingers under the edges of the paper on one side and one end, and bring it up next to the edges of the board, rubbing it a little so as to make a fold at the sharp or lower edges of the board, when you will work both hands up to one of the corners, which will make the point of the paper stand out away from you. Now fold this point toward you, when you have what is known as the "baking-tin" joint. Now do all the other sides and corners the same, folding each corner *toward* you every time, when you will lift your board out of the tray which has thus been formed, and which will be the exact size of the inside of your crate.

Next place a crate on the bench in front of you, and beyond the paper tray, when you will take the tray by the two corners, pressing the baking-tin joint to its place, and slip these joints into the open side of the crate next to you, which holds the joints from spreading out or bothering you while you are placing it in the crate. Now take the two remaining joints between your thumb and forefinger; raise the tray a little till it is of the right height, when the tray can be slipped easily into its place in the bottom of the crate, the joints all coming in place nicely. With the hand, smooth the paper down on the bottom of the crate, when you have something that will not leak unless your honey is smashed bad enough to run over the top.

Now, should I tell you this is all, I should leave out the part which annoyed me the worst, especially where the crate was made so a certain number of sections just fitted it so that they would not shake around when handled, as they should not. The trouble came when I went to put in the last or middle tier of sections in the crate. All the others could be placed up against the sides of the tray in such a manner

that they would not catch on the paper; but when I came to slip down these two last sections, one at each end, the section was sure to catch on the upper edge of the tray, and carry and tear the paper down to the bottom, which made the tray no better at these points than would have been a flat piece of paper over the bottom of the crate. To overcome this I got a very thin piece of tin, just a little narrower than the width of the section I used, when I placed this strip of tin within an eighth of an inch of the bottom of the crate, and bent what stood above over the top of the crate, cutting off what came out beyond the end of the crate. Now, when I came to put in the last section at the end, I took and hung this strip of tin down in the crate over the edge of the tray, which put the tray behind the tin so the section could not touch it, when the section was slipped in place, the tin lifted out by the bent-over end, and all done so smoothly and nicely that there was pleasure in it. Fixed in this way crates never leak unless there is an actual "smash-up;" but this does not hinder any little leakage from soiling the bottoms of the sections. To obviate this, make your crates  $\frac{1}{4}$  inch higher than your sections, and place in the bottom of the tray little strips of wood  $\frac{1}{4}$  inch thick by  $\frac{3}{4}$  wide, and of the same length as the width of your crate, placing them so the ends of the sections can rest on them, when you have something which will not leak, nor soil the bottom of the sections.




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#### TWO MORE REPORTS FROM COMMISSION MEN.

1. 24 to 25 section crates. The New York market prefers honey glassed both sides, or heavy paper cartons, but must not weigh over a pound; less would be preferable.

2. 150 to 200 lb. keg and 5-gallon cans. Barrels are out of the question, as there is no demand for large-size packages, and they will bring from  $\frac{1}{2}$  to 1c per lb. less when in barrels; 5-gallon cans may bring  $\frac{1}{4}$  to  $\frac{1}{2}$ c more per lb. than in kegs.

3. One-pound sections or under. The retail dealer buys honey by the pound and retails it by the section; so if he can buy a case of comb honey, 24 sections, say 21 or 22 lbs., he prefers it. Overpounds will depreciate the price 1 to 2c per lb.

4. Sept. 1st to Dec. 1st. Trade opens usually Sept. 15, and the bulk of the comb-honey trade is done between Sept. 1 and Dec. 1; and if I were a honey-producer I would always ship early and take my chances; for, as a rule, the early bird catches the worm.

5. Would be the means of getting better prices than if there were a glut in California honey. If the honey crop in California is short it stands to reason that New York State honey will do better in prices; for in many cases, if the consumer or manufacturer can buy State goods for  $\frac{1}{4}$  to  $\frac{1}{2}$  c per lb. more than California honey they prefer State honey, and pay the advance.

6. Too early to judge yet, as the weather has been very warm up to the present time. We have advised our shippers to hold back their consignments till the weather is a little cooler.

CHAS. ISRAEL & BRO.

New York, Aug. 29.

1. Single-tier, containing 20 to 25 combs, one side glass, to display the honey and to caution handlers. This case is to be made of clean basswood or whitewood, as these woods do not "weatherbeat" and discolor as pine does. The cover should be nailed on outside, and not rabbeted in, and should be made roomy so that the sections are not crowded, and will come out easily. Twelve-comb cases are not popular.

2. No difference in price of 60-lb. square cans or 150-lb. kegs; but barrels are not so desirable, and have to sell at some discount in price.

3. Three-quarter pound sections, if well filled, are the best-selling size of section, as thin as possible, thereby displaying more comb surface.

4. From September 15th to November 15th. California honey cuts no figure on this market, and sells only in the absence of white clover.

5. Receipts lighter, so far this season. Both receipts and demand seem to be later, which we think a good indication.

Albany, N. Y., Aug. 17.

H. R. WRIGHT.

[These two came after the reports from the commission men that were published in our Sept. 1st number and are, therefore, given at this time.—ED.]

#### DISPOSING OF UNPROFITABLE STOCK.

My 35 stands of black bees failed to increase. Some of the old ones died off, and their yield of honey was quite moderate, so I decided to dispose of them in the most profitable way. Noticing in GLEANINGS an advertisement from a Cincinnati firm for live bees, I wrote them that I presumed they wanted them for medicinal purposes, and that I had a lot of inferior bees that I would sell cheap. After passing a few letters the company shipped half a barrel of alcohol, and on the 23d of October a member of the firm called on me to oversee the preparation of the apes. We put 35 colonies of bees and 25 gallons of alcohol into a fifty-gallon barrel, and shipped them back to Cincinnati as medicated bees. I have so often read of the weight of a swarm of bees that I expected to get from 5 to 7 lbs. from each hive; but I was quite a little surprised to find these figures divisible by two. The average weight was about 3 lbs. This, I suppose, was due to the lateness of the season.

After killing the bees I extracted probably  $1\frac{1}{2}$  gallons of honey, on an average, from each hive. My combs were old, and many of them ill shaped, so I rendered the most of them into beeswax, getting about 2 lbs. to the hive.

I have yet 125 stands of Italian bees, but have a contract with the same firm for another year, so I shall cull out undesirable bees all through the summer, and mark them for destruction at the close of the honey season.

W. W. BRAYSHAW.

DuQuoin, Ill., Feb. 19, 1896.

#### WILL BEES KILL A HORSE?

*Bro. Root:*—Your story of Mr. Nicholas J. Van Patten's calf and his bees, page 645, reminds me of an experience of my own, to know which may be of benefit to some of our friends should they get into a position similar to mine.

It was four or five years ago when I hitched a spirited five-year-old-English shire mare to a buckboard to visit a friend, in company with one of my boys. A three-months-old colt followed the mare. After a ride of five miles on a pleasant forenoon our friend's farm was reached. He had his hitching-rack near the gate, while about 20 feet on the other side of the fence, under the shade of cherry and pear trees, stood his hives of bees, similar to my own arrangement on the farm. My friend was down in the corn-field. We hitched our mare, and went down to meet him. The bees were flying lively. When my friend was reached we saw our mare rearing and trying to tear loose. After awhile she quieted down, and my friend's son motioned and halloed to us; but at the great distance we did not know what he meant. My son went up; and when near the house his motions could not be misunderstood. There was danger, and we lost no time in getting up. We found the mare with her neck hanging over the rack. A swarm of bees had settled on her head between the ears, and she had, apparently, given up to the unavoidable. Mare and colt were covered with bees. I tried in vain to extricate the latter from under its mother. There was no time for long consultations. I unhitched the mare, pulled her around, and, when the wheels of the buckboard went over the colt, it jumped up and joined us in a slow walk down the pike. Walking alongside of the mare I mashed between my hands every bee of that swarm. When the head was cleared we stopped, and ears and nostrils were cleared out. After the bodies of mare and colt were cleaned of bees (and they sat everywhere) we went on. They were as docile as lambs, so I could do with them all I pleased except make them go faster than a slow walk. We went through the Blue River. In a deep place I immersed the colt, and, with my hat, gave the mare a thorough soaker. After they had been in pasture for a week they still showed swollen heads, but



both got over it nicely. The mare shows today not the least fear of bees, and never flinches, no matter how thick they fly around her.

If I had not been about, I believe that an item would have gone the rounds in the papers of a valuable mare and her colt being killed by bees near Morristown, Ind.

Cincinnati, O.

CHAS. F. MUTH.

#### SEVEN-TO-FOOT SECTIONS, ETC.

My bees are doing finely. Honey here is 8 cts. per lb. in comb. I shall lose 300 lbs. of honey by not having the money in time to send for sections. I use nothing but 7-to-foot sections. They do not bulge their combs, and I get from 25 to 26 lbs. in 28 sections. I should think more would use them. A. A. JOLDS.

Big Rapids, Mich., Aug. 31.



#### A WARNING.

I trust you will allow me space to warn readers of *B. B. J.* against risk of serious trouble after the honey-flow has stopped, as may be seen by what follows: I had been removing my surplus during the week and previous weeks, and had left my extractor, cappings, strainer, dishes, etc., all wet with honey, together with the jars I had used for bottling, exposed in my work-room. This was its condition at 6 A. M. on Saturday, the 1st inst., when I left it with the window wide open, with injunctions for others to shut at eight o'clock before the bees began flying for the day. But the others forgot; and on going to my room at mid-day I found it full of bees busily engaged "cleaning up" the loose honey for me. When they had got all they could in this line, they flew around the house in a particularly savage way, searching for more "spoil," and while thus engaged they had occasion to pass our kennels, when a valuable cross-bred "Bedlington" hound thought he would amuse himself by catching a few of them, so he started and killed some, and very soon there was a smell of formic acid, and, consequently, a "row," which ended by the dog having to be rescued, covered with bees, after he had in the affray swallowed a few scores of them. Two other dogs got stung, and also several people. The poor hound first mentioned lived only till midnight, when he died while asleep through drinking sal volatile and carbonate of soda. We rubbed him with ammonia and put him in soda baths, but all was of no avail, as he was too badly stung. Poor fellow! he will be missed in the district, as he was a champion fox-drawer (and killer) when "to-ground." I have had a hunter lent for four seasons for his splendid work. I am having his skin stuffed to preserve the dog's memory and his reputation for pluck. He always had a hatred of bees and wasps, and I had on several occasions to stop him scratching at wasps' nests.—*C. B. Elmthirst, Farnham, Knaresborough, Yorks.—British Bee Journal, August 13.*

#### SELLING THE HONEY CROP.

During the next four months nearly the whole of the honey of 1896 will be sold. Al-

ready some thousands of pounds have been placed upon the Chicago market, and the new comb honey is fine. But thus early some large producers have made a mistake, which we fear will tend to lower the prices here, and keep them down for the rest of the selling season.

Last week we had occasion to go over on South Water Street—where nearly all the large commission dealers do business—and we found that one firm, who are almost new in the honey-business, had received a number of thousands of pounds of nice white comb honey which they were offering at 11 cents per pound. Just a few doors away, and the same time, honey-dealers who have been long in the business, and understand it, and who try to keep up the market prices, were holding the same grade of honey at 13 cents per pound. Now, why the two cents' difference in price? Simply for this reason: The new firm were only anxious to get their commission on the sales, not caring a straw how much or how little the honey would net the producer.

What surprises us is, that large producers are so careless as to ship to such firms; for really they lose on their own crops, and also cause others to lose. Such actions certainly do not show good business sense, nor is it just to other honey-producers.

We should think that, after the "Horrible" experiences of last year, our older readers would be smart enough to keep out of the claws of the vulture-like commission men, and ship only to those who are satisfied to deal honestly.

We want to repeat what we said last year—it is this: Bee-keepers are discouraging honest honey commission men by shipping their honey to new and untried firms who will sell the same honey to neighboring honest dealers at a less price than bee-keepers would think of selling the same honey to the aforesaid honest dealers. Do you see the point? Let us explain.

Suppose we were old and tried honey-dealers here, and were quoting in the bee-papers 13 cents per pound for fancy comb honey—the correct market price. Along comes a new firm, who may appropriately be called Snide & Co., who privately quote the same grade of honey at 15 cents per pound. A bee-keeper ships to them 10,000 pounds. The honey arrives, and Snide & Co. take it to their store. We happen along just after it is unloaded, and Mr. Snide offers to sell us the honey for 11 or 12 cents per pound. We buy it, of course, for it is one or two cents less per pound than the shipper would have thought of letting us have it for.

Well, what does the shipper get for his honey from Snide & Co.? He gets probably a net price of 9 or 10 cents per pound—perhaps in some cases not so much, and sometimes "gets left" entirely—is simply euchred out of the whole thing.

Who is to blame that the producer didn't realize more for his honey? Why, the bee-keeper himself. He lacked sense. He was foolish enough to think that a new firm could secure better prices than an old and established one that quotes actual market prices.

And thus are the toiling bee-keepers swindled by various firms, all of whom should be compelled to wear the name of "Snide & Co.," so that bee-keepers would know, after a few expensive experiences, that all firms by that name are really *snides*, and should be avoided as one would shun the smallpox.

But will honey-producers ever be wise in these matters? Yes, some will; but many will plod on and fall into the same old snares, time after time. Yet there is little excuse now for any reader of a good bee-paper being "caught," for the best firms generally either quote the

market prices in the papers, or their names are found therein, and all others should be avoided, unless you wish to take your chances, or are acquainted with them, and know that they will deal fairly. Of course, the honey-shipper who doesn't take and read any of the bee-papers ought to get swindled, and deserves no sympathy if he meets with a loss that might have been avoided had he been a subscriber to one or more of the best bee-papers.—*Editorial in American Bee Journal.*



C. R. HORRIE & Co., of Chicago, the firm I referred to in our previous issue, and also in a footnote to one of the Straws in this issue, are given a little "free advertising" in the *American Bee Journal*. Last year this same firm, it seems, quoted above the market, and for the same reason, probably, they are doing so this year. Referring to this, among other things, the editor of the *American Bee Journal* says:

When they mailed that letter, they knew that the best comb honey was bringing not over 13 cents per pound in a wholesale way. And yet they quoted 15 to 16 cents. Their scheme is, by quoting high prices, to get bee-keepers to ship them honey on commission, which last year in a number of instances they sold for about what they were offered, and remitted the shipper a net price of anywhere from 7 to 10 cents a pound for white comb honey.

#### SHALL WE EXTRACT AND FEED?

In times gone by we have set it down as a rule that it did not pay to extract white honey and then feed the bees syrup afterward; that the labor of extracting counterbalanced the difference in value between sugar syrup and extracted honey. But is that true? At the very low prices of granulated sugar, good winter syrup can be made for  $3\frac{1}{2}$  or 4 cts. a pound, and good extracted honey brings anywhere from 5 to 6 cts. on an average, according to the honey market published in our last issue.\* The salvage, though not great, is perhaps sufficient to warrant us, at least in some cases, extracting, more especially as the syrup is a better winter food than honey; and, pound for pound, it goes farther. It is agreed, I think, that a colony will consume more pounds of honey than of syrup. If the honey in the first place is amber or dark, better let it remain in the brood-nest unless it is vile enough to kill the bees.

#### ANOTHER BUILDING FOR THE HOME OF THE HONEY-BEES.

NOTWITHSTANDING the hard times all over the country, we find it necessary to put up another large building at the Home of the Honey-bees. This covers the largest area of ground we ever

built on, and is designed to hold a portion of our dried lumber for sections. We have had another smaller building for the purpose, but this had long since grown inadequate for the supply. Our lumber, as fast as it dries to the proper point outdoors, sticked up, is to be put into this large building, and piled up solid, and held in reserve. Our object is, of course, to keep a larger percentage of our lumber white; for after it has become dry it is liable to become badly checked and stained, and, if it stands too long, half rotten. Moreover, dry lumber wet by rain or snow is not as workable, and does not make as nice sections as lumber that is dry and which has been kept dry.

The size of the new building is 52 x 120 feet, and will hold comfortably 600,000 feet of basswood lumber for sections. All the other buildings have been about 40x100. This makes the sixth large building besides a number of other small ones that go to make up the manufacturing plant of the Home of the Honey-bees.

#### THE USES OF HONEY.

A VERY good article on the use of honey appears in the *Ladies' Home Journal*. Among other things are given a number of cooking-recipes using honey, which I trust our lady readers will try and report on. They are as follows:

##### HONEY FRUIT-CAKE.

Four eggs, five cups of flour, two cups of honey, one cup of butter, one cup of sweet milk, two teaspoonfuls of cream of tartar, one teaspoonful of soda, one pound of raisins, one pound of currants, half a pound of citron, one teaspoonful each of cloves, cinnamon, and nutmeg. Bake in a slow oven. This cake will keep a long time.

##### HONEY-COOKIES.

One quart of honey mixed with half a pound of white sugar, half a pound of butter, and the juice of two lemons. Stir this mixture very hard, then mix in gradually flour enough to make a stiff paste. Cut into round cakes and bake in buttered pans.

##### HONEY GINGER-SNAPS.

One pint of honey, three-quarters of a pound of butter, two-teaspoonfuls of ginger. Boil together for a few minutes, and, when nearly cold, sift in flour until it is stiff enough to roll. Cut in small cakes and bake quickly.

##### HONEY SPONGE-CAKE.

One cupful of honey, one cup of flour, five eggs. Beat the yolks and honey together; beat the whites to a froth; mix all together, stirring as little as possible; flavor with lemon, and bake quickly.

##### HONEY TEA-CAKE.

One cup of honey, half a cup of sour cream, two eggs, half a cup of butter, two cups of flour, scant half teaspoonful of soda, one teaspoonful of cream of tartar. Flavor to taste.

##### HONEY POPCORN-BALLS.

One pint of honey. Put it in a frying-pan and boil until very thick, then stir in freshly parched corn, and mold into balls when nearly cold.

The appearance of such an article in a journal of so wide a circulation and influence will do not a little to stimulate the demand for honey. By the way, the *Ladies' Home Journal* is a periodical that I always take pleasure in recommending for its good morals and for the valuable matter that it contains in each issue.

\*Honey Column for this issue is not made up at the time of writing.



## SPILLED HOT WAX; A KINK WORTH KNOWING.

DID you ever spill hot melted wax on the floor—your wife's nice kitchen floor—and then, astounded, query how you did it, and then wonder what was the best thing to do? Perhaps you have let it cool, and then scraped it up with a knife or scraper. You no doubt discovered that it was almost impossible to get it all up in this way, and that even then it had clinging to it more or less dirt and woody fiber.

A few months ago we were rendering in our large wax-tank, preparatory to caking, somewhere about 1000 pounds. It suddenly sprung a leak, and the wax spurted in all directions, all over the floor. There was a hurly-burly, of course; but Mr. Weed, the man who has made such great strides in making foundation, and who certainly is an expert in working wax, as soon as he saw the mishap ran for a pail of cold water, and threw it on the floor over the wax. Several more were thrown on, and, presto! the wax, being lighter, floated on the water; in a couple minutes more it cooled in large thin cakes, perfectly clean and nice. These thin slabs were picked up and put among the good supply of wax. In the mean time the leak had been stopped.

The next time you spill hot melted wax on the floor, try dashing a pail of cold water on top of it.

THE HONEY SEASON FOR THE UNITED STATES;  
REVISED REPORT.

IN our last issue, it will be remembered, I could give only a partial report, and from this report it appeared the season was not as good as was at first expected. Now that all the reports are in, it appears that the season was a little better than the partial report of our last issue made it—particularly for some States. It appears that the discouraging reports came first, and the more favorable ones later.

Taking the States in order, it would seem from the latest advices that the season has generally been good for Florida; same for Georgia. In our last issue Illinois seemed to be generally a failure, with the exception of Dr. Miller's locality. Later advices confirm it. As in our last issue, so in this, Indiana reports a general failure. Iowa comes out in marked contrast. With one exception, all the respondents for that State report the season "good;" "very good;" "best known in years," etc. Only one respondent answers for Kentucky, and he calls the season there poor. The States in their alphabetical order between Iowa and Michigan are the same as reported in our previous issue. Michigan, generally reported as having a poor season, in our last issue, is now reported as having anywhere from good to a fair season.

The year has generally been good in Missouri; indeed, one man says it is the best they have

had in seven years. Only two respondents answer for Nebraska, and they both report good seasons. One answers from North Dakota, calling it fair. In our last number, New York was reported as having had an indifferent season; for this issue it is reported from good to fair. What was true of New York was also true of Ohio. Pennsylvania, according to our last issue, had a poor season. A larger number answer for that State now, and all report, with one exception, poor and very poor. Tennessee is the same as the last issue reported; so also are Vermont and Virginia. Utah is represented by two respondents, who call the season very good. Wisconsin, not reported at all in our last issue, is reported from fair to good.

DEAD BROOD, PICKLED BROOD, OR WHITE  
FUNGUS.

A CERTAIN malady among bees has been noticed by bee-keepers all over the country for the past three or four years. It was no doubt prevalent, more or less, before that time, but was probably confounded with and called foul brood, which it greatly resembles. In our issue for Aug. 15, page 609, I spoke of its coming more and more into prominence, and gave some of the symptoms, and also expressed a hope that some scientist with a good microscope would give his attention to it. In the mean time it seems that Dr. Wm. R. Howard, of Fort Worth, Texas, the author of a most excellent work on foul brood—the very best treatise, in my estimation, that was ever published—has been studying this peculiar disease, and now has come out with an article with illustrations in the *American Bee Journal* for Sept. 10. The symptoms of the disease as he describes it accord very well with what I have noticed in our own yard, and with dozens and dozens of samples that have been sent us by mail from all over the country, by bee-keepers, asking whether it was foul brood.

After a most thorough microscopic examination, Dr. Howard concludes that the cause of the disease is "a species of *aspergillus*, a white fungus or mold." As pollen is a favorable medium in connection with the liquid food he names it *Aspergillus pollini*; and then he goes on to describe why and in what way its growth affects the larva. This is what he says:

When pollen is added to the liquid food, which occurs late in larval life, there being a sweet semi-liquid mixture, the proper medium is present for the growth of the fungus, which at once starts a ferment in the alimentary canal of the larva, breaking through and permeating the entire liquids of the body, giving an acid reaction (chemical analysis proves the presence of acetic acid, or vinegar). This growth takes place generally within three days, the brood dies slowly, keeping up for some time a wriggling motion.

When no more food (sweets) is taken, the medium is soon exhausted and the fungus ceases to grow; the acid condition of the brood prevents the growth of putrefactive germs from the air, so that decomposition does not take place, hence no foul odor; the brood is *pickled in its own liquids*.

This accords very well with a letter just at hand, from a bee-keeper who says that he finds a great deal of dead brood in his hive; and who independently, and without the aid of a microscope, concludes that the "foamy honey" in the same combs in which the disease appears is the cause. When it is remembered that honey, when it has foamed, has "worked," and is turned into an acid condition, we can very easily believe that Dr. Howard may be and is right in saying that the brood is pickled in its own liquid.

#### THE ONTARIO HONEY SEASON.

SINCE the matter concerning the honey season for the United States went to press (see another column) the *Canadian Bee Journal* has come to hand, giving reports from a large number of bee-keepers all over Ontario. It seems the editor of that paper sent out a series of questions, and replies seem to show that Ontario has had an unusually good flow of honey. With scarcely an exception, all report a good flow from basswood; the next best in their order are clover, thistle, and buckwheat. It would look as if Ontario has had a far better season than any State on this side of the line unless it be Iowa. The bees are also reported to have wintered well in Ontario.

#### LOOK OUT FOR THE HONEY-SHARKS.

DON'T, *don't* ship honey to strangers, even if they do write plausible letters and give bank references. A syndicate of sharks this year are quoting honey at high prices, and wanting to purchase outright. Their scheme is to get the producer to make a *bona-fide* sale, and then the bee-keeper will wait and never get his pay, because these swindlers are execution-proof; in other words, not collectable. When honey is sent on commission, the commission man is liable if he does not make some sort of returns. I'll have more to say on the subject in our next.

#### THE PROPOSED CONSTITUTION FOR THE NEW SOCIETY OR UNION.

THE following, from Dr. A. B. Mason, will explain itself:

It was my intention to submit the inclosed constitution in this form to the other members of the Amalgamation Committee, and I did so yesterday, Sept. 8, for their criticism and suggestions; and then, when as well prepared as we could do it, present it to the North American at Lincoln, as the report of the committee. But I have been urged by you and the editor of the *American Bee Journal* to have it published in the bee-journals, so as to give all an opportunity to make any suggestions they may see fit, *before* the convention meets; and just to get rid of importunities (no, not just for that, for I guess your way is the best after all), with a few touches I send it to you.

Now, to hasten matters, let each one who wishes to make any suggestions write them out in full, *wording them just as they would like to have them worded*, and send directly to me, so as to reach me not later than October 3d, and I will see that what

they send me is laid before the convention at Lincoln.

You know I'm in favor of calling the organization the "North American Bee-keepers' Union," and don't you let a single one who writes me criticise that name; just criticise the proposed constitution, and let me alone. Direct all letters to

A. B. MASON, Station B, Toledo, O.

#### ARTICLE I.—NAME.

This organization shall be known as the United States Bee-keepers' Association.

#### ARTICLE II.—OBJECT.

Its object shall be to promote and protect the interests of its members, and to promote the general interests of the pursuit of bee culture.

#### ARTICLE III.—MEMBERSHIP.

Any person may become a member upon the payment of one dollar annually to the Secretary or General Manager, except as provided in Section 8 of Article VI. of this constitution, or an Honorary member by a majority vote of the members present at any regular meeting.

#### ARTICLE IV.—OFFICERS.

The officers of this Association shall be a President, Vice-president, a Secretary, and a Board of Directors, which shall consist of a General Manager and six directors, whose term of office shall be for one year, or until their successors are elected and qualified; and the Director, aside from the General Manager, receiving the largest number of votes shall be chairman of the Board of Directors. Those who are now officers of the National Bee-keepers' Union shall constitute the Board of Directors of this Association until their successors are elected and qualified.

#### ARTICLE V.—ELECTION OF OFFICERS.

SEC. 1. The President, Vice-president, and Secretary shall be elected by ballot by a majority of the members present at each annual meeting of the Association, and shall constitute the Executive Committee.

SEC. 2. The General Manager and the Board of Directors shall be elected by ballot during the month of December of each year by a majority of the members voting; blank ballots for this purpose, with a full list of the membership, shall be mailed to each member by the General Manager; and said ballots shall be returned to a committee of two members who shall be appointed by the Executive Committee, whose names and postoffice address shall be sent to the General Manager, by said Executive Committee on or before the 15th of the November preceding the election. Said committee of two shall count the ballots and certify the result to the General Manager during the first week in January.

#### ARTICLE VI.—DUTIES OF OFFICERS.

SEC. 1.—*President*. It shall be the duty of the President to preside at the annual meeting of the Association; to deliver an address at the next annual meeting after being elected, on some subject of interest to bee-keepers, and to perform such other duties as may devolve upon the presiding officer.

SEC. 2.—*Vice-president*. In the absence of the President the Vice-president shall perform the duties of President.

SEC. 3.—*Secretary*. It shall be the duty of the Secretary to keep a record of the proceedings of the annual meeting; to receive membership fees; to furnish the General Manager with the names and postoffice address of those who become members at the annual meeting; to pay to the treasurer of the Association all moneys left in his hands after paying the expenses of the annual meeting; and to perform such other duties as may be required of him by the Association; and he shall receive such sum for his services as may be granted by the Board of Directors.

SEC. 4.—*General Manager*. The General Manager shall be Secretary of the Board of Directors, and shall keep a list of the names of members with their postoffice address; receive membership fees, and be Treasurer of the Association. He shall give a bond in such amount, and with such conditions, as may be required and approved by the Board of Directors, for the faithful performance of his duties, and perform such other duties as may be required of



him by the Board of Directors, or by this Constitution.

SEC. 5. At the time of sending the ballots to the members, for the annual election of the Board of Directors, he shall also send to each member a statement of the financial condition of the Association, and a report of the work done by said Board of Directors.

SEC. 6. The Board of Directors shall pay the General Manager such sum for his services as said Board may deem proper, but not to exceed twenty per cent of the receipts of the Association. Said Board shall meet at such time and place as it may decide upon.

SEC. 7.—*Board of Directors.* The Board of Directors shall determine what course shall be taken by the Association upon any matter presented to it for consideration, that does not conflict with this constitution; and cause such extra, but equal, assessments to be made on each member as may become necessary, giving the reason to each member why such assessment is required; provided that not more than one assessment shall be made in any one fiscal year, and not to an amount exceeding the annual membership fee, without a majority vote of all the members of the Association.

SEC. 8. Any member refusing or neglecting to pay said assessment as required by the Board of Directors shall forfeit his membership, and his right to become a member of the Association for one year after said assessment becomes due.

#### ARTICLE VII.—FUNDS.

The funds of this Association may be used for any purpose that the Board of Directors may consider for the interest of the members of the association and in the interest of the pursuit of bee culture.

#### ARTICLE VIII.—VACANCIES.

Any vacancy occurring in the Board of Directors may be filled by the Executive Committee; and any vacancy occurring in the Executive Committee shall be filled by the Board of Directors.

#### ARTICLE IX.—MEETINGS.

This Association shall hold annual meetings at such time and place as shall be agreed upon by the Executive Committee.

#### ARTICLE X.—AMENDMENTS.

This Constitution may be altered or amended by a majority vote of all the members, provided notice of said alteration or amendment has been given at a previous annual meeting.

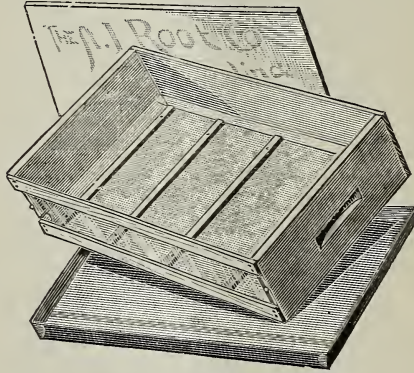


#### THE NO-DRIP SHIPPING-CASE.

We have advertised these for some time; but supposing that nearly every one knew about the use of paper trays in the bottom of the shipping-cases, and little sticks to raise the sections off from the said bottom, we have not been sending along any directions. Mr. G. M. Doolittle, in his usual department, describes exactly such a case as we have been selling. A few days ago, however, one of our customers complained that our shipping-cases, or at least the ones we sent to him, were too deep for the sections; and that, in his opinion, our packer, evidently recognizing the fact, had very kindly (?) put in some little sticks which he (the customer) thought were to be piled on top of the sections to fill out the space between them and the cover. This, he thought was a rather botched way of sending out shipping-cases.

It did not take us very long to explain to him

that the cases were made so on purpose, and that his trouble was due to the want of directions. In another column Mr. Doolittle describes this form of shipping-case; and it is no other than he himself and other bee-keepers of York State and elsewhere have been using with much satisfaction, and which we ourselves adopted during the past season because of the request of bee-keepers and commission houses.



NO DRIP SHIPPING-CASE.

The no-drip shipping-case is the same as any other case, only a trifle deeper. With each case we send along a sheet of paper a little larger than the inside dimensions of the case. This is folded up into a paper tray, as shown in the annexed cut, just under the shipping-case. It is then inserted, strips laid in  $4\frac{1}{4}$  in. from center to center, and nailed as shown. Perhaps some of you may ask, "But *why* these strips? Why not set the sections right down on to the paper tray itself?" Did you ever notice that, when sections get to dripping, and stand upon a flat surface, how those sections will stick and hang to the surface? The little film of honey that enters between the surface and the bottom of the section seems to act just like so much glue. To remedy this, the sections should be set up a little on cleats or strips of wood thick enough to raise them up anywhere from  $\frac{1}{8}$  to  $\frac{1}{4}$  from the paper tray. Now, then, if any drip runs down it runs on to the paper tray, and does not come in contact with the sections, except that it may touch where the corners of said sections rest on the cleats. Ever since we began sending out these shipping-cases, we have received the hearty approval of bee-keepers and commission men. The idea is old, and has been in use for a number of years. It was originated, I believe, by that prince of American bee-keepers, Capt. J. E. Hetherington, of York State, the man who has the reputation of owning and operating the largest number of colonies of any one bee-keeper in the world. One of these cases was sent to us by a friend of the captain's two or three years ago. I knew at the time it was a good thing, but neglected to bring it before our readers.



## OUR HOMES.

Therefore shall a man leave his father and his mother, and shall cleave unto his wife; and they shall be one flesh.—GEN. 2:24.

There are many things in this world so beautifully arranged, when we come to understand the matter fully, that our hearts are involuntarily raised to God in thanksgiving for his great and precious gifts. Somehow or other of late I have been thinking of the marriage relation in connection with the institution that we call home—the relation of husband and wife. Adam and Eve started the first home. No doubt it was a model home, and they were a model couple until they transgressed and fell. I love to see married people together. I enjoy seeing them side by side when they are first married, and stand before the great wide world, each one saying by act if not by word, "We two are husband and wife." No good man ever feels ashamed to acknowledge he is a married man; and I do not think I ever heard of a woman who tried to make out that she was not a wife when she really was. You see, as a rule women are a little readier than we men to bear their part of the matrimonial yoke. Well, I not only love to see the young bride and groom, but I love to see the young couple working together to build up a home. I love to see them when they proudly show to friends and neighbors the first baby; and when I am visiting homes I love to hear the parents say, "Mr. Root, these are our children;" and I enjoy hearing them say something to the effect that this is the little group that God has given them to train and fashion in wisdom's ways. I love to shake hands with the grown-up boys too, when they are so big that the mother and perhaps the father too is obliged to look up a little. If they look up because the stalwart son is taller than either, it is well; if because the grown-up son and daughter are better educated, more talented, and more skillful than either the father or mother, better still. The parent is rarely jealous because the child excels. Then, again, I like to see the *gray-haired* couple show me their grandchildren; and it rejoices my heart exceedingly to see the old couple show a loving regard for each other. Yes, it rejoices my heart to see them *lovers* still after a family has been reared; for, inconsistent and unreasonable as it may seem. Satan often gets into the home, even after the children are grown up and gone. Dear aged brother and sister, if you in your old age have ever felt like being cross and harsh toward each other, please believe me when I tell you that Satan rarely leaves any couple entirely alone after the honeymoon days have passed by and gray hairs have come. Look out for him. It is now less than 48 hours since I was tempted to speak harshly toward the dear partner of my sorrows and joys. I did not speak a word, mind you; but even a glimpse of the thought made me feel guilty. I said to myself, "God have mercy on me a sinner," for I was a sinner to let Satan come so near that I even *heard* his suggestions. After my little prayer had banished him entirely, I looked at the dear face across the table, and imagined how it must have pained her gentle spirit had I spoken it out loud; and then I would not have done it for worlds. O dear friend, let me beg of you to be careful. Little do you know how you may look back in memory and remember every harsh and cruel word if you have allowed yourself to go so far as the latter. Remember, the relation between you two was framed by the great God above in the beginning of the

world; and it stands at the beginning of *every thing* that is good and pure and holy.

A few days ago a letter was put into my hands that has stirred me more than any thing else that has come for a long while. The dear brother who wrote it never dreamed that it would be used for publication; but yet I know he will not object when I tell him that his letter may prove to be a message to many a home where GLEANINGS goes. Here it is:

*Bro. Root:*—With a sad heart and streaming eyes I write you this letter. You told me in your last letter to read a certain chapter. I can't read it now, for the joy of my life is gone. The greatest comfort on this green earth was my wife. When you wrote about Mrs. Root's sickness, I tried to read it in a stammering way; but the tears flowed down Belle's cheeks (I always called her "Belle"). We have lived together fifteen years, as happy as ever two people lived, I think. God blessed us with five children (three girls, two boys), here in a little cabin in the West Virginia hills. She always read your paper with interest, especially the religious part. She was converted in 1878, when only 17 years of age. When we were married she joined the M. P. church. She was the pastor's daughter (of the same church). I was a hard-hearted sinner, and had been through many a revival meeting; but soon after we were married she said to me one day with a sad heart while we were at the table that there were two things she missed. I asked what, as I always wanted to please her. She said it was family prayer and thanks at the table. Of course, this put me to thinking. I had become hardened in sin; but she did not stop there. Five long years she prayed for me (ofttimes when I was asleep), and shed many a tear for me. She was a full believer in prayer. At last I gave up and told her I would try. I will not tell you what strange things took place when I was converted, and how God *worked* on me, for you may get tired of this kind of letter. But I want to tell you that my dear wife took sick Aug. 12th, while I was away a day and a half; and when I came home I found her very poorly. I tried to get her to take something, but she did not want to doctor any. I sent for the doctor, however, and he thought it would be no serious trouble. Three days and nights he doctored, but no relief. Now, Bro. Root, the darkest hour began to come. Dark clouds began to rise thick and fast. I became restless—was here and there, finding no relief. We have an Indian doctor 11 miles away, so Sunday, at dark, I started for him, as he had doctored my wife and had always helped her. Oh! you don't know what a night, with tears falling fast, thinking of a loved one at home, racked with pain, awaiting my return. Then I thought of you and your prayer for Mrs. Root, so I prayed in anguish of heart that long 22 miles. The doctor came, and seemed to help for awhile; but she had other troubles that seemed to all work against her. The dear little baby, only two years old, was usually her first thought in the morning and last at night. She seemed to be her greatest anxiety. I am not boasting at all when I say everybody who sees her speaks of the beauty and brightness of poor little "Clista." What will become of her now?

When you speak of things to eat I think of my oldest daughter, who can bake as good light bread (or better) as I find in traveling this country over; and she is now doing the housework too, at only 13 years of age. I must say this: She had a good mother's training, which was a Godsend to me. I verily believe if it had not been for her tears and prayer I should have been *lost* for ever. Oh! I thank God for good women. The thought has come to me, shall I prove faithful without her? May God help me! Oh! pray for me that I may never give up till the last battle is fought, so I can lay down the cross and take up the crown.

In my dreams I saw A. I. Root last night, and was telling him of my sorrow. What a blessed thing it is to have Christian friends to tell our sorrows to! I never in all my life saw any person suffer as dear Belle did all through the long two weeks. She prayed that God might come and relieve her from pain; so on Wednesday night, after all this long suffering, Jesus came to her. Her brother stooped low and listened, and heard her speak of "white." Then she said, "Lord take me; is this not enough?" Just a night or two before she was taken sick I called on her to pray, as we did it by turns when



she was well. I thought she prayed more earnestly that night for the training of her little family than ever before.

It seems that I could give up every child I have better than this dear companion. Oh the long and lonely hours at night, when every thing is still! Bro. Root, you are a stranger to me; but your picture has made such an impression on my mind that you looked natural, as I saw you in my sleep; so if we never meet in this world I believe I shall know you on the other shore. Pray for me that I may follow my loved ones, training and teaching my children to love the Lord and make an undivided family in that sun-bright clime.

Benson, W. Va.

ABBOTT CLEMANS.

Dear brother Clemans, let me remind you in this, your hour of trial, how much you have to be thankful for compared with those who have no hope or faith in God. Your earnest prayers, it may have seemed to you, were not answered—that is, God did not see fit to grant what you asked; but as time passes I am sure you will discover that God *did* hear and did *heed*, nevertheless. It is not his holy will that our prayers should all be answered. You will remember that the prayer of the dear Savior, uttered in such anguish of spirit, was not granted. He ended, "Thy will, not mine, be done," as we should always end our petitions. But God gave him grace to meet the trial, and he will give you grace too. This deep affliction that you are passing through will wean you in a measure from earth, and at the same time draw you toward heaven and heavenly things. The dear companion has been called away; but her works do live after her, and you are finding them already in the care and companionship of that little family. May I venture to ask you to be careful that that dear child of thirteen does not overwork herself? Stand by her as you stood by your wife. Remember she is but a child still, and will, perhaps, long for childish joys and pleasures. Very likely she will be strongly inclined to be self-sacrificing. Do not let her go too far in that way. You did all you could to save your wife. If there are physicians in the world who could have treated the case better it was not in your power to procure them. You did the best you knew how, constantly asking God to guide you. Let this thought comfort you. There is a limit to human responsibility; and when we have done all that we can, and have placed the whole matter in God's hands, then we should let the matter rest there. Under the circumstances, he has seen fit to take the dear companion from your home. When I first received the letter I took it over and read it to Mrs. Root; then I took it down to the dear old mother in the evening, and read it to her. She said it ought to have a place in the Home Papers.

When you speak of seeing my poor self in your dream, it brings to me a feeling of unworthiness. You felt that it would be a comfort to you to tell A. I. Root your troubles, did you? When I first read it, and, in fact, every time since, it has seemed to me as though I must take my wheel and hunt up that little home, and sit down and have a talk with you and with the dear children. It reminds me of the time when I was away off in Michigan, where a dear brother gave me the old arm-chair and the family Bible, and asked me to read to him and his motherless children from the precious words of scripture. Perhaps it will some time be my privilege to meet you and your little flock. If so, I hope you will find me not too great a contrast from what you saw me in your dream. Is it really possible that the readers of GLEANINGS have been thinking of me in that way in their times of trouble?

Now, dear brother, the lesson God has permitted you to carry to the thousands of homes

where GLEANINGS goes is this: To bid the husband and wife and the father and mother be gentle toward each other. Neither one of you knows when this relation you have enjoyed together so long may be broken off. When you are tempted to be harsh or unkind; when you are tempted to argue or dispute with each other, stop and think, dear friends, of brother C. at the present time. Sometimes you start a little discussion or disagreement almost in jest. You let it go on just in pleasantry or foolishness; and before you know it, something harsh or unkind has been said. Do not do it. Do not in jest say any thing that sounds unfeeling or disrespectful. God instituted the relation that exists between you two. He has sealed and cemented it by giving you children, and may be grandchildren. Do any of you know how a *child* feels when he discovers that his parents are not getting along well together? I can think of nothing more painful. But a few days ago I heard of a home where the father and mother had not spoken to each other directly for several months, and yet they have a tolerably good-sized family of grown-up children to feel hurt and embarrassed by this state of affairs. May God forbid! and may married people throughout our land take warning in time!

But a few days ago I saw a statement somewhere, to the effect that the number of divorces granted in Ohio during the past year was away up in the thousands. You had better put up with any thing, or *bear* with almost any thing, rather than separate; and even if you decide to separate, do not think of a divorce. Let the arrangement be so that each or both of you can repent and get back. Do not let your little petty disagreements come out before the world. Before the world you have stood together as man and wife—perhaps for many long years. Now, even if you have troubles and trials, be careful about letting the *world* know it. If your companion has peculiarities that are not pleasant, do not speak of it to a living soul. Make the best of it; ask God to help you; and let me say again what I have said before, that, where even *one* of the parties is a devout Christian, the other is pretty sure to follow sooner or later. See what friend Clemans has told us. His wife prayed for him five long years; and while she prayed she lived a life *consistent* with that prayer, and God gave her her reward.

I can not tell just now why I have been impressed to speak in this way to the readers of GLEANINGS. At first glance the letter I have given you would hardly suggest the matter; and yet I do believe that God in his providence has impressed me to take up this subject. If it should prove to be a message sent from God to you, dear brother or sister, you can write and tell me about it. Whenever I hear of a divorce it gives me a feeling of sadness and pain. Perhaps the Bible has not said so, but I can tell you, dear friend, that there will be no divorces in heaven, and God's calls to us here on earth are not in that direction. Perhaps it would not be well to tell even your old friend A. I. R. your troubles and trials in getting along in the home where God seems to have placed you. My advice is, remember, not to tell *anybody*. But you can tell with safety and security all your troubles to the dear Savior. He has never yet turned any one away, and he will give you better advice than any mortal on earth can give. Make him your friend and confidant in trial. When tempted, do not, I beg of you, forget to turn to him in prayer. Take the little prayer that I have given you—"Lord, help;" and remember that your friend who is writing these words is constantly praying for the fathers and



mothers in every home where GLEANINGS goes. May you be a united family here on earth, proof against every suggestion of the prince of darkness; and may you be united, *too*, in that heavenly home of which we know so little, but where, we may be sure, we shall all meet again.



#### ON THE WHEEL.

"Mr. Root, you have never been out to visit my apiary, and yet you go around on your wheel a good many miles further off. Just come out and see how we have got things fixed."

The above remark was made by a young man whom I have seen frequently at our place buying bee-supplies, etc. Among other things, he told me they had a field of 17 acres of buckwheat in full bloom, and it was only seven miles from my home. Yesterday, September 1, I found time to get away for a few hours, and was very agreeably surprised when I turned up at the residence of M. C. Kramer, Mallet Creek, O. The lawn around his house and buildings made me think of T. B. Terry's. One of the prominent objects at the further end of the lawn was a very pretty windmill completely inclosed, rising above quite a good-sized building, with a tank and other appliances connected therewith. From this windmill and tank, pipes are laid so as to furnish water to every one of their numerous buildings on their 300-acre farm. Not only this, but there are pipes for attaching a hose in three or four places wherever water may be likely to be needed around the premises. I asked if those pipes would not freeze up in winter.

"Oh, no!" said Mr. Kramer; "for before freezing weathur comes we draw off the water; then the plug at the top of the pipe is screwed in while the pipe is full of air. When they are thus arranged, no water can get up into the pipe to freeze, until the plug is removed so as to let the air out."

I mention this because we have gone to considerable expense in our hot-beds and cold-frames that we may empty our pipes of water so they may not freeze in winter.

The apiary is located in the orchard. There are about 75 hives nicely painted and tastily arranged. When friend K. made the remark that they were not yet through extracting, I expressed some surprise; but on going into the honey-house I saw sealed combs of honey tiered up in the hives waiting for a spell of hot weather, so the thick honey could be thrown out. Several large cans were filled to the brim. On sampling the honey I uttered an exclamation of surprise. It was very thick, of crystal transparency, and of that peculiar rich ripeness that we get only where the honey is sealed over, say in July, and left in the hive to ripen till September. If I wanted some honey to put on our table I would rather give 10 cents per lb. for some like friend Kramer's than 5 cents for honey that is sometimes shipped in to us by bee-keepers. Now, this idea is an old one, but it is one that should be emphasized again and again. Their honey crop was all sold at 10 cents per lb. I use the expression *their*, for there are three or four brothers who manage the 300-acre farm; and two of them, if not more, turn in and help when the honey season is rushing.

Their honey is engaged in the city of Cleveland, delivered to private customers. Their crop for the past season was about 2500 lbs., both comb and extracted. The comb honey is put six sections in a neat wooden box, with a circular opening in each end to show the quality of the honey. These are sold at an even dollar a box, the sections being so arranged that each package of six sections weighs pretty nearly the same amount. This makes a very neat strong package to handle, and many well-to-do people would prefer to buy it a dollar's worth at a time.

I asked one of the boys if there were any other crop on their farm that paid any better than their bees, considering the amount of time they required. He said he did not know of any thing else that paid as well at the present time. But this industry would not pay without the careful painstaking that is apparent everywhere. These people did not expect me when I came, for the invitation was given over a month ago; but the house where they do their extracting was neat and tidy. You could walk over the floor without making a snapping noise with your shoes because they stuck to the floor. The door to the honey-room was through an outside entry; that is, you open and shut two doors in going in. The entry was perfectly dark. This made it next to impossible for the bees to get in and get a taste of stolen sweets. The bees are all very finely marked Italians, and there was no robbing or buzzing around anywhere.

They aimed to extract all of the white-clover and basswood honey. If the bees do not fill up on buckwheat sufficient for winter, they are fed in the open air, for there is not a hive of bees kept in any direction within three or four miles of this apiary. This outdoor feeder is simply a large pan used for boiling sap, with corncobs placed all over the surface of the syrup, to keep the bees from drowning. In a little while they can feed enough so that every colony in the 75 has a pretty good stock of syrup for wintering; and the Kramer brothers are satisfied that sugar syrup is better for wintering than late fall honey, or even the honey from their clover and basswood, for that matter, or any other *honey*. You see, they are firmly satisfied that the position your old friend Novice took more than 20 years ago is a sound platform. I suggested that perhaps those combs of sealed honey standing in the honey-house would be cheaper feed for the bees than the syrup—that is, after the sugar syrup was deposited in the combs and capped over. They claim, however, that, even were this true, sugar syrup is a *safer* feed for winter. About ten years ago young Kramer had nearly a hundred colonies. During a disastrous winter he lost all but six, and he pretty *nearly* lost his enthusiasm. Since then he has depended mainly on sugar syrup for wintering-stores, and has pretty well the upper hand of the wintering troubles.

"Oh! look here, Mr. Root; you must not go away without seeing my grapes."

Across the road from their residence is a little piece of ground of between a quarter and half an acre in size. It slopes gently toward the southeast, and at the bottom of the slope is a carp-pond. The grapevines are trained on three wires. The wires are held tight by a roller at one end. A crank can be placed on this roller, the wires be drawn up, and the roller fastened with a set-screw. The Concord grapevines are planted about a rod apart, I should judge; and although I have seen loads of fruit on Concord vines, I think I never saw such great *masses* of fruit as on some of these. Why, the great stout wires were really bending



down to the ground under the weight, although there was a post say every two rods. Now, this result was on what would be called, ordinarily, poor clay land. The whole secret was in keeping the ground clean. With cultivator and hoe the weeds are kept out so you see nothing but the yellow dirt. I suspect the agency of the heat of the sun in warming up the bare ground has something to do, not only with the immense crop of grapes, but with the remarkable sweetness of the fruit. He said if I wanted to taste some that were real sweet I should come up where the reflection of the sun on the side of the barn had ripened them ahead of the others.

We have so many apples at home that I thought they would have nothing to offer, probably, any better than ours; but my eye caught a glimpse of some small-sized ones streaked with a vivid white and pink. They could not tell me the name of these apples, but asked me to taste them. I at once uttered an exclamation of surprise, it was so tender, crisp, and juicy. I have heard people speak of strawberry apples, but I do not know that I ever saw one. If this were called a strawberry apple, I should think it rightly named, and I want some grafts put into my orchard. How I should enjoy giving a lot of these apples to a group of juveniles to sample!

My visit was rather too late to see the bees on the buckwheat; but friend Kramer will get forty or fifty bushels per acre, I should judge, from some acres of that great field. The bees have not stored a very great quantity this season from buckwheat.

Now a word in regard to poor seasons. In our report in our last issue, the impression was given that in Ohio the season was poor. I tell you, friends, it is not the season nor the locality so much as it is the bee-keeper; and a good many times the apiarist gets lazy and loses his enthusiasm. Why, just look here. Even after some of the veterans here in Medina Co. have abandoned the business and let their apiaries go to ruin, saying it does not pay, there are within ten miles of us half a dozen wide-awake bright young bee-keepers who are making good crops year after year. I believe it will do them good to mention their names: M. C. Kramer, U. Prince, M. C. Chase, Vernon Burt, and others. These men get a paying crop year after year. For them the seasons are all fairly good. In my travels the matter is freely discussed, and the question is asked why it is that bees have not stored honey in the last ten years as they used to do some 20 or 25 years ago. Well, I begin to think the bees are just as ready and willing to do their part now as they were when the business of bee-journals was first started. I did not see that report from Wisconsin on page 644 of our last issue until it was in print; and when I did it made my heart bound. Why, there is a report that is almost equal to any thing ever given in any year, and yet we have letters from Wisconsin bee-keepers telling doleful stories of no honey to speak of for the last three or four years. (Come to think of it, I guess letters of this latter class come from certain persons who give that as an excuse for not paying some little accounts which have been standing a long while.) May be I am getting on to somebody's toes just a little. A year ago Dr. Miller might have bristled up and showed fight at what I am saying; but just see what a report he has made during this past season. Now, did the bees wake up, or did Dr. Miller wake up with unusual enthusiasm in the spring of 1896? I never thought of it before; but don't you believe the *beefsteak diet* has something to do with his present honey-crop after all? Well, we can all agree on this at any rate: It behooves the bee-keeper,

whether he be old or young, to have his dish right side up, and his faith in a loving Providence bright and clear, whenever the honey *does* come.

There is one thing about wheel-riding, especially in the cool autumn days, that is so remarkable that I want to speak about it again. It is this: A few days ago I wanted to go out to see T. B. Terry dig his potatoes. It was just the nicest kind of weather to dig potatoes, and I was sure he would be at it. But it was not the nicest kind of weather for wheeling. There had been quite a shower the day before; but I concluded the roads would be traveled enough in a couple of hours so they would be very nice, and there would be no dust, you know. As I wanted to get an early start so as to get back the same day, I knew I should have a tough time of it till the farmers got around with their teams so as to smooth down the roughness.

I found things a little worse than I expected. Before 9 o'clock I was tired out, and scarcely ten miles from home. It seemed utterly impossible for me to make the 25 miles that day. The teams had been cutting the roads up when they were soft and mushy; and it seemed for a while as if I could make better progress on foot. Toward noon the roads got better, and I began to get my second wind. Well, about 3 o'clock I was in splendid riding trim, although I had made already about 40 miles; and I could hardly resist the temptation to take another 40 miles on the wheel instead of going to the station to get home on the train. Had it not been that I had promised Mrs. Root not to take any more long rides I fear I should not have chosen the latter. One of the bicycle papers suggests that, whenever one can not sleep at night after a long ride, he has ridden too hard or too far. When you have had the proper amount of exercise on the wheel you will sleep nicely—much better than if you had taken no ride at all; but whenever you ride so far that the sleep seems "knocked out" of you, then you have been overdoing, even though you do not feel it. By going home on the train I slept beautifully. Had I pushed on, however, and made 70 or 80 miles in one day, very likely I should have slept at only short intervals through the night. The strange part to me is that, after a wheelman gets into this second wind, he has got past the point, as it would seem, of fatigue; and with even tolerable roads he goes on without realizing he is tired. Why is it that we do not meet this state of affairs in any other kind of exercise? Of course, the outdoor air has something to do with it; but I suspect that filling the lungs to their greatest capacity with oxygen is the prime factor. I remember that, the day I have been speaking of, I could not forget my fatigue or get over it until after climbing several moderate hills in succession. They were just long enough to make me puff pretty well each time as I approached the summit, and I took a rest in going down on the opposite side.

Just before reaching Remson's Corners, in this county, I alighted to walk up a long hill and met my friend Dr. Albertson. I stopped at his well, and while enjoying my drink I think my eye must have glanced over the edge of the dipper, and caught a glimpse of a row of cherry-trees loaded with great luscious-looking yellow and red cherries. I uttered an exclamation of surprise:

"Why, doctor, where in the world did you get a variety of cherries of such size, and ripening right here this first week in September?"

"O Mr. Root! that is just what I wanted to show you. But, bless your heart, they are not cherries but *plums*."

The leaves, the shape of the tree, and every



thing, made them look exactly like cherries. The shape of the fruit, and the brilliant scarlet also, said that they were cherries; but the owner declared they were *plums*. He says they were propagated from suckers, so they are natural fruit—no grafting nor budding. He says the variety has been called *s-l-o-w*; but he thinks that is not the way it is spelled. He says he thinks the variety has been catalogued, but he has not heard much about them of late. Now, if any of our readers can tell me more about this plum I shall be very greatly obliged. They are very late—coming after all other plums are gone, or pretty much so. We found a few that were prematurely ripe, and the flavor seemed to be almost exactly that of some of the choicest wild plums that are sometimes found in the woods. The doctor is going to bring me some of them when they are fully ripe; and I would give more for a row of these plum-trees than for almost any other plum I ever saw. They may be “slow” in name, but they would not be slow a bit if I had them growing on my place.

As I expected, friend Terry and his son Robert were digging the potatoes. Both Thoroughbreds and Freemans were doing grandly—that is, considering the terrible washouts on the side hill they had experienced. His potatoes this year are on rolling ground. A good deal of the soil was washed away from the potatoes on the hillsides, and quite a good many at the bottom of the hills were covered with mud until they were killed out entirely. In order to get the most potatoes from a small amount of seed from Thoroughbreds, they were planted 40 inches apart each way, so, of course, the yield *per acre* will be much less than the Freemans planted about 30 inches apart, and say 14 inches apart in the row. Notwithstanding the tremendous wetness, he has no rotten potatoes. And this reminds me that, down on our creek bottom, half a dozen varieties of potatoes where they were covered with water have rotted entirely. Before the rains came there were potatoes large enough to make a very fair yield; but when we came to dig them they were rotted and gone, with nothing but the skins to indicate where the potatoes had been. Now, one patch of Thoroughbreds was under water more than any other of the rest, and I had given them up as lost, for the water killed the tops, and I supposed they would not be worth digging. Imagine my surprise when we found the potatoes were all perfect—no rot, not even a bit of scab. This was where we applied the sulphur; but we also applied sulphur to the others that rotted so badly.

□ Wilbur Fenn's potatoes were late as usual. He has one field of 18 acres that I pronounced the handsomest large field of potatoes I ever saw in my life. They are Sir Williams and Monroe Seedlings. They were all planted in July. There is not a bit of blight, no bugs, nothing to mar the beauty of the foliage. We went over the field, putting in our fingers here and there to see what the prospect was for a crop. I asked him if he had any variety of potatoes that would cook dry and mealy when half grown. You know the catalog men, or a great many of them, claim their new variety is always mealy and dry, even though they are not bigger than hickorynuts. Mr. Fenn replied:

“Cousin Amos, I rather think the Sir Williams will be nice to cook just as they are;” and he pulled out an armful of fine specimens so green that the skins would slip almost if you touched them. He carried them into the house, asking his good wife to prepare them for dinner. In due time his bright little girl that superintended the dropping of that whole 18-acre field

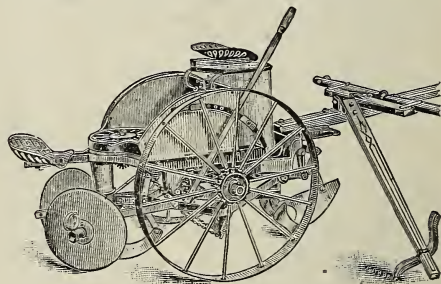
announced, “Dinner is ready!” and, as sure as you are alive, there was a heaping bowlful of Sir William potatoes with the skins bursted open almost like pop corn. Wasn't I glad I was off from the beefsteak diet! When I was asked to return thanks, I tell you I felt that I could do it honestly from the bottom of my heart.

Cousin Fenn has a family of three boys and three girls, and all of them know all about raising potatoes. I declare! I had forgotten that the youngest was only nine weeks old, so we shall have to make that exception. But it is to me a beautiful sight to see such a united family as this one. And, by the way, I have before spoken of their girl Ellen, now 12 years old, who rides on the potato-planter and fixes the pieces so there is not any miss in the whole field. After the planting was done, there was once in a while a vacancy, and her father said she must have missed a few hills.

“No, father, I am sure I did not miss. You just dig down and see if you do not find the piece of potato right there in place. It is the fault of the potato and no fault of mine that it did not come up.”

Sure enough, they found the piece of potato. Her grandfather, Dennis Fenn, declares he would give her \$1.50 a day to ride on the machine, and put the pieces in the cups. He says she is worth more than any hired man they can get.

Now, friends, here is another opening for women to help in the farmwork. Her father fixed a little awning over her seat, so she was not obliged to work in the full blaze of the hot



THE IMPROVED ROBBINS POTATO-PLANTER.

sun. Since we have had so much to say about this new planter I think I will give you a picture of it, showing the cups, etc.

Somehow or other it seems almost impossible for me to take a wheelride twenty miles from home without getting lost. During this last trip I took a back road because it happened to be better; but it took me through a new part of the country. There were no guide-boards, and pretty soon I was at a loss to know which way to turn to strike T. B. Terry's. I took the wrong road, as it transpired, and by and by I was astonished to find myself close to the home of Matthew Crawford. Just as soon as he saw me and my wheel he expressed his pleasure by saying he had something special he wanted me to see. Friend C. has little beds for starting strawberries, and for his potted plants, much like my own, except that they are only 4 feet wide. He started this way, and has therefore got all his beds made this width. Instead of having them in a compact group he has them here and there in different points all around his house. For potted plants waiting for orders he plunges them into beds up to the brim, and then shades them with frames covered with cotton until they get “weaned” after being detached from the mother-plant. Then choice varieties



are planted out in these same beds, making two rows lengthwise of the bed. These rows are about 2 feet apart, and the plants stand 6 inches apart in the row. By keeping the runners pinched off he gets enormous berries in these rich specially prepared beds.

We soon came to a bed containing about thirty plants. These plants had a little more room, perhaps a foot apart. As soon as I saw them I raised my hands in surprise, for they were the finest-looking, rankest-growing strawberry-plants I ever saw in my life. The runners that were just taking root here and there were almost the size of leadpencils; and the colors of these great runners were almost as brilliant as the colors of a ripening peach.

"Well, I *do* declare! Friend C., is this a new variety that gives this enormous growth, or is it some special treatment?"

"Mr. Root, the wonderful growth you see is due both to the variety and treatment. The plants are the 'Nick Ohmer,' and you have four of them already. The special treatment is this: There is quite a quantity of rich old compost spaded under the surface of the soil; but it is not the compost alone. After preparing the bed I stamped it down as hard as I could tramp the mellow ground; then I afterward pounded it as I would pound the ground around a post, and this is the result."

□ "Now, old friend, you have missed quite a little speculation. Had you showed me these plants, and told me they were a new variety just out, and were worth \$1.00 a piece, I would have taken half a dozen, without a moment's hesitation. As it is, I want to say to you that the sight of this bed has been worth my whole hard ride of 25 miles over the hills this morning."

You see, this is nothing particularly new after all. T. B. Terry and others fine up their wheat ground on the surface until every lump is pulverized—until the ground is like the dust in the road, in fact. After having done this the soil is packed down hard with a heavy land-roller. This is the way they get such enormous crops of wheat. Now, mind you, this can be done only when the soil is very dry; and it is especially needed on light sandy soils like friend Crawford's, or any soil where a great amount of stable manure has been applied. As soon as it was explained to me I understood exactly why strawberries do not do well at this time of the year in my plant-beds where the soil is almost half stable manure.

Right beside the strawberry-bed was a tomato-vine climbing a bean-pole—that is, with the help of strings that held it fast to the pole. This tomato-vine was bearing nice fruit from the ground clear up about as high as your head; and when I expressed surprise at such a quantity of nice tomatoes on one vine, my friend replied, "Why, dear me, Mr. Root! we have been picking ripe tomatoes almost every day for weeks past from this very vine."

You know friend C. said some years ago, when I first gave the world the Ignotum that he was going to discard all other tomatoes. I did not see any other plants around. If that one Ignotum tomato climbing the bean-pole supplies his whole family, then I have never given the Ignotum half the credit it deserves. But it is the man *Matthew Crawford*, and not altogether the Nick Ohmer strawberry that makes such a beautiful plant.

Just at this time somebody said dinner was ready; and the first thing that caught my eye was a heaping dish of good nice-looking potatoes with their jackets bursting open, and their rich contents puffing out, just as I found them

at Wilbur Fenn's. Of course, I wanted to know what variety it was. Friend C. informed me that it was the Flagel, originated a few years ago in that locality. The originator, when the potato first came out, valued each tuber at about the price of a horse. Now, *that* is away ahead of the Thoroughbred. I suppose friend C. would let you have quite a good lot of potatoes of that variety, for a horse just now.

"Bro. Root, you have come in upon us without notice to-day, and now we have nothing but fresh pork in the way of meat for dinner;" and he looked a little troubled while he waited for my answer.

"Why, bless your heart, friend C., I do eat pork, and potatoes too, as you will find out before I finish my dinner."

Then I had to apologize after awhile for eating dinner long after the rest had finished. I told the boys that, if they had climbed great hills for 25 miles, as I had done that forenoon, they would comprehend the situation. By the way, friend C. is quite fortunate in having a couple of stalwart young men (his own boys) to help him on his strawberry-farm, since he is getting old enough to feel like taking things a little easier.



#### THE DWARF ROCKY MOUNTAIN CHERRY.

In John Lewis Childs' new fall catalog we find this cherry boomed just the same that he and other catalog men have been booming it. We have not space to give the whole, but we take out the following in regard to the quality:

□ The fruit when ripe is a jet black, and of a size somewhat larger than the English morello; in flavor superior to any other variety.

Lovett, from whom we obtained the plants, says in his '96 catalog:

In quality and flavor it is akin to the sweet cherries, excellent in flavor, and a pleasant fruit for eating out of hand.

Now, the truth is, this cherry is just about as delicious as a piece of soap, and not a bit more. In fact, it tastes more like soft soap than any thing else I can think of. Perhaps it gets its flavor from the spread-eagle advertisement the catalog men give it. Mr. Childs may say, it is true, that he has never seen a plant growing, and has never tasted the fruit. But I stoutly maintain that no seedsman has any right to use such words of praise year after year without making a trial test of these new fruits on their own grounds. They may say that is too much trouble. If they do, I hope their customers will conclude it is too much trouble to read their catalogs. After they have been swindled as I have, I think they will feel so. I have watched the fruit day after day, and even wrote it up, it looked so handsome with its beautiful load of "cherries." I kept thinking that may be the fruit would get better when it was riper. But the fruit got ripe and rotted on the bushes. But it never was fit for anybody or any thing to eat.

There is another shrub I got at the same time, called the "tree cranberry." It is very pretty when in bloom, and the scarlet berries are quite showy; but woe betide the urchin or anybody else who gets a taste. I have tried it at every stage of ripening, and I find it so bitter and disagreeable that one wants to rinse his mouth with water after having tasted even a



single berry. It is all well enough to grow these things for ornament; but the catalogs should state distinctly that the fruit is only ornamental, and not fit to be eaten. There is quite a lot of other new small fruits just coming out, mentioned in the new catalogs. Are we to spend two or three years in caring for these until fruiting time, and then find it is only another swindle? Why don't our experiment stations buy these high-priced things first and then speak out without fear or favor? I know we have some seedsmen who refuse to give place to these horticultural wonders until they have *tested* and *tasted* the fruit. If anybody else has a Rocky Mountain cherry or a tree cranberry, and finds it any different from what I have stated, I should be glad to give place to his report.

#### STRAWBERRIES BY THE BARREL; BEEF DIET IN SUMMER.

*Mr. Root:*—Have you tried raising strawberries by the barrel? The plan is becoming quite popular around here. Procure a large barrel; bore as many  $1\frac{1}{2}$ -inch holes, equal distances apart, in the staves as you wish to set plants. Out of rough lumber make a box 3 inches square inside, and as long as the barrel is deep. In the sides of this box bore a number of  $\frac{3}{8}$  or  $\frac{1}{2}$  in. holes. Bore a few small holes in the bottom of the barrel, and fill in six or eight inches of rich soil. Place the wooden box on this in the center of the barrel, in an upright position. Set plants in the holes in staves as you fill the barrel with the richest garden soil or compost to be had. Fill the box with water as often as necessary, and the plants will fairly boom. It is some work to fix it up, but it has a few advantages. Strawberries, and fine ones too, can be grown by it where the ground is full of stones, tree roots, weeds, etc.; ease of cutting runners and gathering the fruit. A lazy man might want it hung on pivots; then with a seat the right height he could sit and turn the plants to him to do the work.

To protect the plants in winter, a little rye straw is set up around the barrel, and tied.

I live out in the country, away from butcher-shops; and, wishing to use the "meat diet," during the warm weather, I devised the following: The latter part of last winter I cured and dried a large quantity of lean steak from a young and well-fatted animal. To prepare it for use I took one of my jack-planes and made the bit as sharp as a razor. Then I placed it upside down in my vise and screwed it fast, and set a dish under the bit. By having the bit set properly I can easily shave the dried steak as thin as the paper I am writing on. It is twice as palatable, and just as beneficial, as fresh steak prepared by the Salisbury method, and less trouble. Enough for a whole family can be sliced in a few minutes. This jack-plane, when sharp, is the best cabbage-cutter and cucumber-slicer I ever saw.

Arlington, Pa.

W. C. SIMONS.

Strawberries and dried beef seem to be a rather strange combination, friend S.; but that reminds me that, while I am on a pretty clean beef diet, I can eat strawberries and other ripe fruits much better than almost any other sort of vegetables. Nice ripe fruit, taken in moderation, and fresh from the tree or bushes, seems to agree very well with the beef diet. But green corn and beans, cabbage, squash, and suchlike, do not answer so well, at least for me. Your plan of raising strawberries is not altogether new, but you have given us some modification. I think I would mix in quite a lot of old well-rotted manure in filling up that barrel; and it would be an easy matter to apply liquid

manure through the tube if desired. Dried beef, sliced very thin, has for years been a wholesome and favorite article of food in our household.

#### THOROUGHbred POTATOES.

To-day I dug my Thoroughbred potatoes. From the one pound I got of you last spring I got 63 $\frac{3}{4}$  pounds. The largest weighed one pound five ounces. The vines were not dead yet. They were planted the last of May I am ashamed to tell the cultivation they got (or lack of it, rather). They received no manure, and were cultivated with a horse but twice, and hoed three times.

A. W. PORTER.

Baraboo, Wis., Aug. 29.

Friend P., I would never dig potatoes before they are ripe and the vines thoroughly dry—that is, if I wanted to get the largest possible yield. If you want the potatoes to eat or to sell, that is a different matter; but if you are going to save them for seed next year, by all means let them get thoroughly ripe. T. B. Terry told me at my last visit, where potatoes are to be dug by a potato-digger they should remain in the ground until some time after the vines are dead and dry; otherwise they are more likely to be bruised, and some varieties of potatoes are likely to rot after being bruised or cut. I should think your yield was a big one, especially with the care you gave them.

#### SWEET CLOVER.

In a recent number of this paper, Mr. J. L. Gandy, of Nebraska, made this remark about sweet clover:

Since it has been demonstrated that sweet clover makes good hay and pasture, many of our farmers, instead of trying to exterminate it, as has hitherto been the custom, are encouraging its growth.

Editor Root offers the following comment upon the above, in GLEANINGS:

This is a good point. Let us keep them circulating. I expect to say, and keep on saying, until I do not have to say it any more, that sweet clover is not a noxious weed, but is one of the best honey-plants in the world; that it yields nectar everywhere, and that its flow is prolonged, not days, but weeks and weeks; that if it grows anywhere it grows in waste places; is easily exterminated; that cattle learn to eat it in preference to many other kinds of green forage, and it makes a fairly good hay. I have said these same things before; but it seems it must be repeated in different ways in order to make people believe it.

This is a subject upon which we are in entire agreement with Mr. Root, for we reside right in the midst of a sweet-clover region. Does it yield honey? Well, we should think so. It yields for a long time, and, to our taste, its honey is the finest of all.—*Editorial in American Bee Journal.*

#### LOOK OUT FOR HIM!

*Mr. Root:*—We find in going over the towns of Wilkinsburg and Braddock that there has been a man there selling honey to the people. He represents he is a member of your firm, and tells some people he is a son of A. I. Root. We rather think this party is a fraud. He is misrepresenting us, and we should like to know if he is your agent.

J. A. BUCHANAN & SONS.

Holliday's Cove, W. Va., Sept. 14.

We hardly need say that no member of our firm has ever been out through the country selling honey or any thing else. A. I. Root has only two sons. One of them is editor of this journal, and has his hands full pretty much all the time, day and night. The other one is a school-boy thirteen years old, who manages to keep about as busy as the older one; but it is not always strictly *business* he is busy about. If the man mentioned above comes your way, just show him this item.